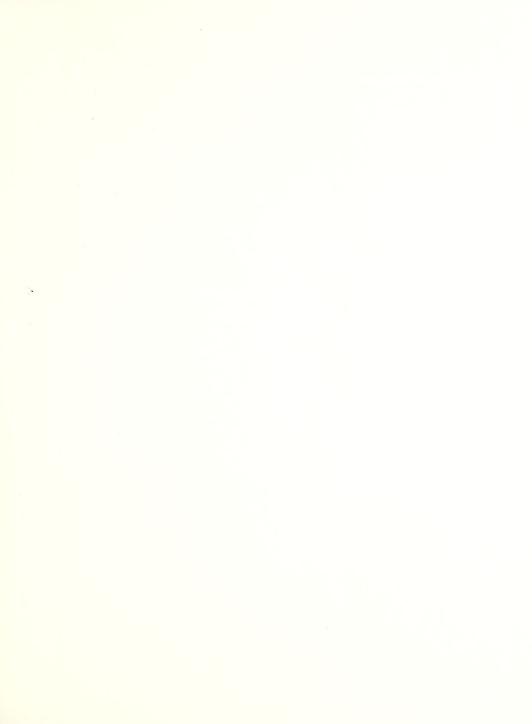


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LISTENING

Cassette Indicator	•	378
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CASSETTE INDICATOR



Photograph courtesy of American Printing House for the Blind

CASSETTE INDICATOR

DEVELOPER

Manufactured by: American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206

CONTACT PERSON

Ralph E. McCracken American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206 (502) 895-2405

WHERE IT IS USED

Listening Reading

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

U.S. Department of Health, Education and Welfare

WARRANTY PROVIDED

information not available

FOR SALE

American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206

\$.30

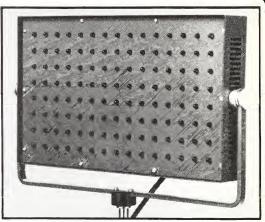
HOW IT WORKS

The Cassette Indicator consists of an aluminum cylinder 3/8" in diameter and approximately 12" long. One end of the cylinder has been cut away so that three equally-spaced prongs remain. prongs are rounded on the ends and are approximately 1/8" long. The other end of the cylinder has one rounded projection the size and shape of a braille dot. The purpose of this device is to indicate if the tape is moving or has stopped. To obtain this information, the three-pronged end of the indicator is inserted in one of the cassette sprocket holes; then by placing the finger on the braille dot, it may easily be determined whether or not the tape is moving. This device can be used only on open-faced cassette machines.

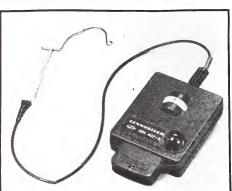
(Information based on American Printing House for the Blind literature.)

INFRARED LISTENING SYSTEM





Infrared Light Emitter



Hearing Aid Adapter



Headset

Photographs courtesy of Sound Associates, Inc.

INFRARED LISTENING SYSTEM

DEVELOPER

Sennheiser Electronics West Germany

CONTACT PERSON

Rose Jaffe Sound Associates, Inc. 424 W. 45th Street New York, NY 10036 (212) 757-5679

WHERE IT IS USED

Listening

PROBLEM(S) IT OVERCOMES

hearing impairment; eliminates space between speaker and listener as sound goes directly to the ear

FIELD TESTED

yes

West Germany

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Sound Associates 424 W. 45th Street New York, NY 10036

HOW IT WORKS

This system consists of an infrared light emitter and individual receivers. The infrared light emitter is mounted on a wall bracket near a stage or podium then plugged into a 110 volt outlet and into an audio line of the existing public address amplifier. The emitter sends infrared light containing audio signals throughout the room. Individual headsets or hearing aids worn by the user receive the audio signal and volume is individually controlled. The electronic parts of Sennheiser's headset are in a plastic housing worn under the chin and supported by two acoustical tubes. It operates on a rechargeable battery. The Sennheiser hearing aid adapter is designed for people needing high amplification. Signals from the light emitter are fed to a small induction loop, (rather than driving an earphone), which hooks behind the user's ear next to the regular hearing aid. This system is only for indoor use. A component for home use is also available.

(Information based on Sound Associates, Inc., brochure.)

PERSONAL SOUND SYSTEM

Photograph not available	

DEVELOPER

Dr. B. Leshowitz Audio Device, Inc. 4702 E. Calle del Medio Phoenix, AZ 85018 (602) 959-6927

CONTACT PERSON

Same as Developer

WHERE IT IS USED

PROBLEM(S) IT OVERCOMES

hearing impairment; suppresses background noise found to destroy speech intelligibility received through a conventional hearing aid

FIELD TESTED

yes

sound systems employing infrared light transmission have been marketed by Sennheiser for a number of years

REGULATORY APPROVAL

no

WARRANTY PROVIDED

yes

FOR SALE

Audio Device, Inc. 4702 E. Calle del Medio Phoenix, AZ 85018

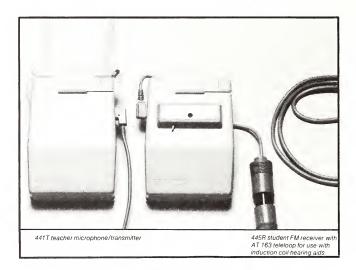
HOW IT WORKS

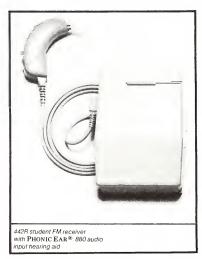
The Personal Sound System consists of a transmitter and a receiver. The transmitter converts the audio signal of a TV, radio or other source into an infrared light beam. The transmitter operates from an electrical outlet or a rechargeable battery. The portable receiver, worn by the listener, is battery operated. The receiver converts the light signal from the transmitter back into sound which drives an earphone.

Applications include: personal hearing aids; public address system for people who are hard of hearing; and wireless reproduction of home TV and stero sound.

(Information provided by B. Leshowitz, Audio Device, Inc.)

PHONIC EAR^R PERSONAL FM SYSTEMS





Photographs courtesy of HC Electronics, Inc.

DEVELOPER

Phonic Ear^R/Phonic Mirror^R
HC Electronics, Inc.
250 Camino Alto
Mill Valley, CA 94941
(415) 383-4000

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Communication Listening

PROBLEM(S) IT OVERCOMES

environments in which competing room noises and or reverberation impedes speech discrimination by hearing aid users

FIELD TESTED

information not available

REGULATORY APPROVAL

Federal Communications Commission

WARRANTY PROVIDED

yes

FOR SALE

Phonic Ear^R/Phonic Mirror^R HC Electronics, Inc. 250 Camino Alto Mill Valley, CA 94941

HOW IT WORKS

The Phonic Ear^R Personal FM Systems consist of three main components: two different FM receivers and a microphone/transmitter

The microphone/transmitter is a miniature wireless FM transmitting station designed to transmit the speaker's voice at a constant sound pressure level to the 442R receiver or the 445R receiver worn by the hearing impaired person. It can be worn lavalier-style or on the belt with a small lapel mike. Transmitting on one of many frequencies, the speaker's voice is only received by wearers having the proper matching RO (receiver oscillator) plugged into their receivers, eliminating spillover from other transmitters. The 442R receives the transmitted voice of the speaker and provides this signal to the wearer's hearing aid for amplification. The hearing aid connects to the receiver with an audio input cord for audio input hearing aids, or with an AT 163 Teleloop for hearing aids without audio input capabilities.

The 445R receiver functions like the 442R receiver. In addition, it has a built-in environmental microphone for hearing aids that have a telecoil (T) position but not a microphone/telecoil (M/T) position. This allows the wearer to receive the speaker's transmitted voice and monitor their own voice or have conversation with people in close proximity. The environmental mike can be turned off at the wearer's discretion.

(Information based on HC Electronics, Inc. literature.)



MACHINE TRADES

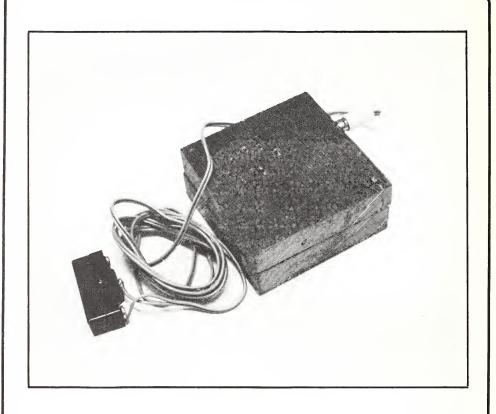
~	
Audible Signal Device, Lathe Work Alignment	388
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MACHINE TRADES (cont.)

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AUDIBLE SIGNAL DEVICE, LATHE WORK ALIGNMENT



Photograph courtesy of Jeff Hamm, WVSC

AUDIBLE SIGNAL DEVICE, LATHE WORK ALIGNMENT

DEVELOPER

Jerome Golner Golner Precision Products 354 Cottonwood Avenue Hartland, WI 53029

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Machine Trades: Lathe Operation

PROBLEM(S) IT OVERCOMES

aligning work accurately on a lathe when one cannot see

FIELD TESTED

ves

used in one factory by one blind employee

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

no

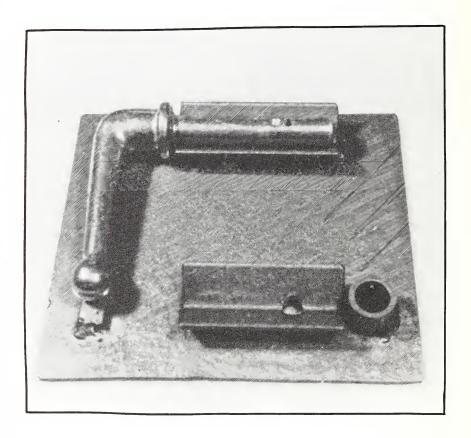
FOR SALE

no

HOW IT WORKS

The audible signal device can be used as a warning for carriage travel or to indicate parts in a four-jaw chuck. To use it, adjust the microswitch so that the actuating button contacts the work to be aligned, rotate the work and advance across slide until a signal is heard on one segment of the part. Adjust the jaw until no signal is heard. Repeat the sequence until a signal is heard all around the diameter of the work.

(Information based on personal communication with Jerome Golner.)



Photograph courtesy of California Department of Rehabilitation

DEVELOPER

Charles Eckles Independent Contract Consultant (213) 360-4180

CONTACT PERSON

California Department of Rehabilitation 830 "K" Street Mall Sacramento, CA 95814 (916) 322-8500

WHERE IT IS USED

Machining

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

HOW IT WORKS

This jig assists in positioning parts for accurate drilling of holes on a drill press. It is made with a simple angle iron support to keep it level and a fixed stop to assure the hole will be drilled in the same place at the same angle each time.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

GRINDER MODIFICATION I



Photograph courtesy of A.R. Colby

GRINDER MODIFICATION I

DEVELOPER

Pratt & Whitney Aircraft Group Manufacturing Division 400 Main Street East Hartford, CT 06108

CONTACT PERSON

A.R. Colby, Manager EED Program Pratt & Whitney Aircraft Group Manufacturing Division 400 Main Street East Hartford, CT 06108

WHERE IT IS USED

Manufacturing

PROBLEM(S) IT OVERCOMES

inability of someone who is legally blind to adjust a typical grinder machine quickly and accurately

FIELD TESTED

ves

used by one employee

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

For information about obtaining a closed circuit TV camera and viewing screen, contact:

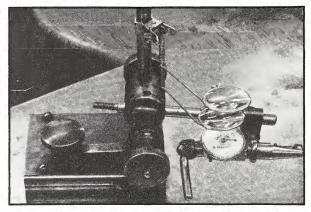
Visualtek 1610 26th Street Santa Monica, CA 90404

HOW IT WORKS

The grinder operator pictured opposite is legally blind (20/200 vision or less when wearing glasses). He can operate 5-6 pieces of milling and grinding machinery. To accommodate him. Pratt & Whitney obtained a few special aids. The grinder operator uses a conventional 50X microscope to check pieces for chips or other flaws. He uses a couple of double magnifying lenses to check the "Last Word" indicator of his grinder. He also uses a closed circuit television camera and viewing screen made by Visualtek to check his work (p. 582). The Visualtek camera can be seen in the upper left corner of the picture and is positioned directly on his work. The viewing screen can be seen just behind his right shoulder.

(Information provided A.R. Colby.)

GRINDER MODIFICATION II





Photographs courtesy of A.R. Colby

GRINDER MODIFICATION II

DEVELOPER

Pratt & Whitney Aircraft Group Manufacturing Division 400 Main Street East Hartford, CT 06108

CONTACT PERSON

A.R. Colby, Manager EED Program Pratt & Whitney Aircraft Group Manufacturing Division 400 Main Street East Hartford, CT 06108 WHERE IT IS USED

Manufacturing

PROBLEM(S) IT OVERCOMES

inability of someone who is legally blind to adjust a typical grinder machine quickly and accurately

FIELD TESTED
yes

used by one employee

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

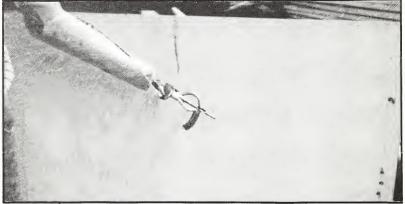
information not available

HOW IT WORKS

This set of magnifiers is used by a legally blind employee to check the "Last Word" indicator of his grinder. See Grinder Modification I, (p. 392) for a description of the other job aids used by this employee.

(Information provided by A.R. Colby.)





Photograph courtesy of Philip Wineland

DEVELOPER

Philip Wineland Alber Drive State Technical Institute Plainwell, MI 49080 (616) 664-4461

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Benchwork Cabinetmaking Construction

PROBLEM(S) IT OVERCOMES

potential safety hazard experienced by someone with an arm prosthesis when using a jointer or table saw

FIELD TESTED

yes

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

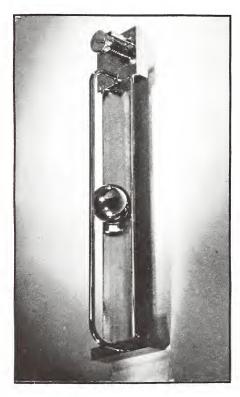
FOR SALE

no

HOW IT WORKS

Person is able to hold down a peice of wood and push it over a jointer or through a table saw with more control and less danger of injury.

(Information provided by Philip Wineland.)



Carpenter's Level



Electronic Level

Photographs courtesy of American Foundation for the Blind

DEVELOPER

CONTACT PERSON

Alex H. Townsend American Foundation for the Blind 15 West 16th Street New York, NY 10011 (212) 620-2169

WHERE IT IS USED

Benchwork Construction

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

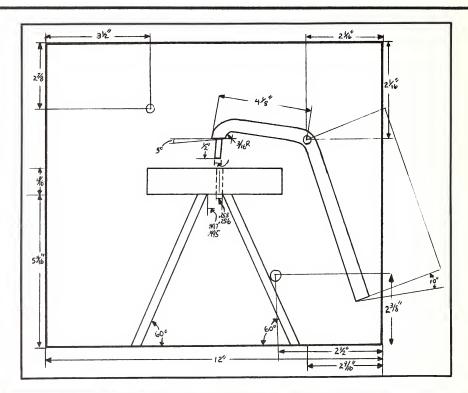
American Foundation for the Blind 15 West 16th Street New York, NY 10011

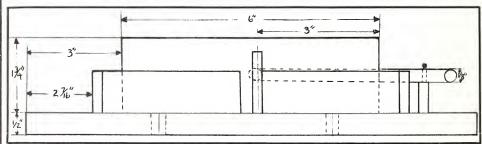
Carpenter's Level \$35.00 Electronic Level \$96.00

HOW IT WORKS

The Carpenter's Level determines if a horizontal surface is level. A steel ball rolls in a 6½" V-trough. The screw at one end changes the level ½" per revolution. A retaining rod keeps the ball from falling out. It is nickel plated. The Electronic Level provides accurate horizontal or vertical leveling, comparable to spirit levels used by sighted workers. This aluminum level, 2' long, provides an audible signal for both horizontal and vertical measurements. The audible tone stops when unit is level or vertically aligned.

(Information based on American Foundation for the Blind literature.)





(not drawn to scale)

Diagram courtesy of Bob Warren, redrawn by Terri Bleck, WVSC

LOCATION JIG

DEVELOPER

Bob Warren J.A. United Cerebral Palsy of Akron 318 Water Street Akron, OH 44308 (216) 376-6041

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Machine Trades

PROBLEM(S) IT OVERCOMES

lack of persistent control and grasp strength

FIELD TESTED

yes

United Cerebral Palsy - Akron, OH

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

no

HOW IT WORKS

The location jig is designed to attach to the work table of a drill press, utilizing pre-cast slots in the table. The jig with its V-design makes location of the casting easy and positive. The casting can only be located in the correct position due to an offset in the jig which only accommodates the casting in the correct position. The V-design also makes loading easier because it helps keep extraneous movement to a minimum, and alignment positive. A kickout lever is attached to insure quick. positive removal of the casting after drilling by simply moving the lever to the right.

(Information provided by Bob Warren, UCP.)

MEASURING DEVICE FOR WOODWORKING: DADOING



Photograph courtesy of Russ Gage

MEASURING DEVICE FOR WOODWORKING: DADOING

DEVELOPER

information not available

CONTACT PERSON

Russ Gage 4820 South 20th Street Milwaukee, WI 53221 (414) 281-0076

WHERE IT IS USED

Carpentry Sheet Metal Working Woodworking

PROBLEM(S) IT OVERCOMES

difficulty experienced by a blind person when making precise cuts in wood or other materials

FIELD TESTED

ves

used by one blind person

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

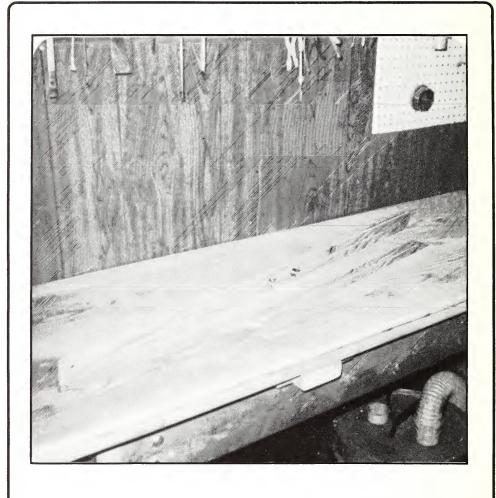
FOR SALE

no

HOW IT WORKS

Each piece in this set is 6" in length. They are used to line up a saw or a router. The thickness is the unit of measurement. The smallest is 1/8" thick; the next is 2/8" or 1/4" in width, and so on up to 1". (Eight pieces of metal are fastened together to make the 1" piece.) The grooves running across each piece allow a blind user to make sure he or she is using the desired size. (Four grooves equals 4/8" or 1/2", etc.) If you must dado a board to a depth of, say, 3/8" you can set the 3/8" unit nut to the table saw blade and raise or lower the blade to the desired height.

(Information provided by Russ Gage.)



Photograph courtesy of Russ Gage

DEVELOPER

William Peters 508 8th Avenue Sterling, IL 61081

CONTACT PERSON

Russ Gage 4820 South 20th Street Milwaukee, WI 53221 (414) 281-0076

WHERE IT IS USED

Cabinetmaking Carpentry Sheet Metal Working

PROBLEM(S) IT OVERCOMES

difficulty a blind person has when measuring paneling, shelving or drywall

FIELD TESTED

ves

used by one blind person

REGULATORY APPROVAL

no

WARRANTY PROVIDED

nο

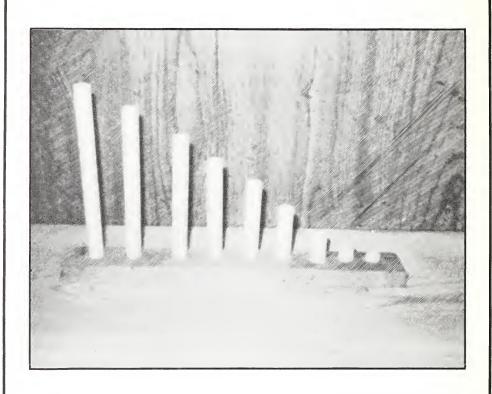
FOR SALE

no

HOW IT WORKS

This item is a slide measuring device made from ¼" by 3" paneling. The length of each piece can vary to meet the needs of the user. The longer board has a ½" groove in the center. The groove is several inches long. The shorter board also has a $\frac{1}{4}$ " groove running nearly its entire length. Two carriage bolts and wing nuts are used to hold the two boards together. By loosening the wingnuts you can adjust this "slide rule" to measure the width of a shelf for a bookcase, or closet, or find the distance between studdings. Tightening the wingnuts holds the measurement until you can use it to score the board you are going to cut. This is very handy when measuring paneling and drywall for electric switch openings and outlets.

(Information provided by Russ Gage.)



Photograph courtesy of Russ Gage

William Peters 508 8th Avenue Sterling, IL

CONTACT PERSON

Russ Gage 4820 South 20th Street Milwaukee, WI 53221 (414) 281-0076

WHERE IT IS USED

Cabinetmaking Carpentry Sheet Metal Working

PROBLEM(S) IT OVERCOMES

difficulty experienced by blind persons when attempting to cut wood and other materials precisely

FIELD TESTED

yes

used by one blind person

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

FOR SALE

no

HOW IT WORKS

This device is made of plastic water pipe. The pipe was cut into different lengths, from ½" to 8" in length. A 3-sided file was used to mark the size of each: 4 inches was four grooves, etc. These pieces are used to measure the length, or especially the width of a board to be cut with a table saw. You put the end of the proper size of pipe against the saw blade, then move the saw's fence up to the other end of the pipe. You then can cut the size needed. If you need a size which is larger than 8", you can tape the proper combination of tubes together with masking tape. (The width of the plastic pipe is 3/8" inside diameter and 1/2" outside diameter.)

(Information provided by Russ Gage.)

MICRO COMPUTER DRILL PRESS MULTI-AXIS INTERFACE FOR CEREBRAL PALSY AND QUAD PERSONS

Photograph not available

MICRO COMPUTER DRILL PRESS MULTI-AXIS INTERFACE FOR CEREBRAL PALSY & OUAD PERSONS

DEVELOPER

Clinical Convenience Products Contracting Serv. Div. 2070 Helena Street Madison, WI 53704 (608) 251-2882

CONTACT PERSON

Don Warren 2070 Helena Street Madison, WI 53704 (608) 251-2882

WHERE IT IS USED

Machine Trades Structural Work

PROBLEM(S) IT OVERCOMES

limited control of hand and arm movements

FIELD TESTED

yes

prototype only at Clinical Convenience Products - Madison, WI

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

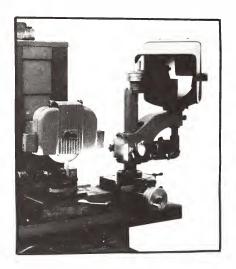
FOR SALE

Clinical Convenience Products Contracting Service Division 2070 Helena Street Madison, WI 53704

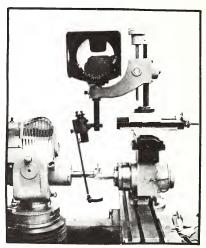
HOW IT WORKS

The Autocom developed by the TRACE Center, Madison, Wisconsin (see p. 154), is connected to the drill press controls by means of an electronic switching box. This box also contains a series of small lights, one of which lights each time a drill press function is activated using the Autocom cell programmed to perform that function. That is if the user selects the "on" cell on the Autocom, the drill press turns on, and a little light on the switching mechanism box goes on. Another light comes on if the user choses the Autocom cell which lowers the drill press, raises it, adjusts the press table, and so forth. This visual feedback from the lights allows the user to verify the choice made. It also allows a little more leeway to change the choice if it is incorrect.

(Information provided by Ricardo Cerna, Rehabilitation Engineering Specialist, Wisconsin Division of Vocational Rehabilitation, and Don Warren.)



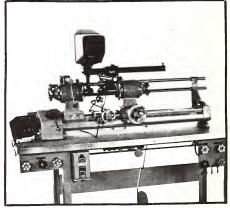
Reversible support arm and horizontal lens system on grinder



Reversible support arm over work spindle



Mounted with tool holder as Presetter



Mounted on glass forming lathe

Photographs courtesy of Stocker & Yale, Inc.

OPTICAL PROJECTION EQUIPMENT

DEVELOPER

Manufactured by: Stocker & Yale, Inc. 133 Brimbal Avenue Beverly, MA 01915 (617) 927-3940

CONTACT PERSON

Michael A. Lavey Stocker & Yale, Inc. 133 Brimbal Avenue Beverly, MA 01915 (617) 927-3940

WHERE IT IS USED

Benchwork Machine Trades

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

ves

standard industrial product

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

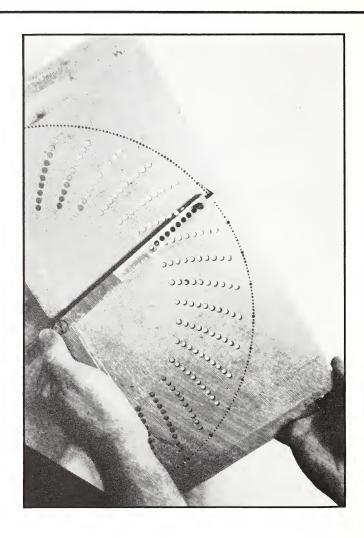
Stocker & Yale, Inc. 133 Brimbal Avenue Beverly, MA 01915

Quotation given on price, depending on model and application, \$3,000 - \$5,000 range.

HOW IT WORKS

In order to align, inspect, gauge, fit or measure machine parts, a screen, lenses (10x, 20x, 31.25 or 50x), illumination and related accessories project a magnified image on the screen making measurement and inspection easier. The operator can view and work on a part without removing it from the machine. The system can be adapted to various machines, (machine tool cutter, surface grinder, lathe, miller), using a reversible arm support or an extension boom arm. The mounting can be over the work spindle, directly to the work table, over the wheel spindle or on the base of the machine.

(Information based on Stocker & Yale, Inc. literature.)



Photograph courtesy of Jeff Hamm, WVSC

Jerome Golner Golner Precision Products 354 Cottonwood Avenue Hartland, WI 53029

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Machine Trades: Lathe Operation

PROBLEM(S) IT OVERCOMES

setting and or measuring specific angles when one cannot see

FIELD TESTED

yes

used in one factory by one blind employee

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

no

FOR SALE

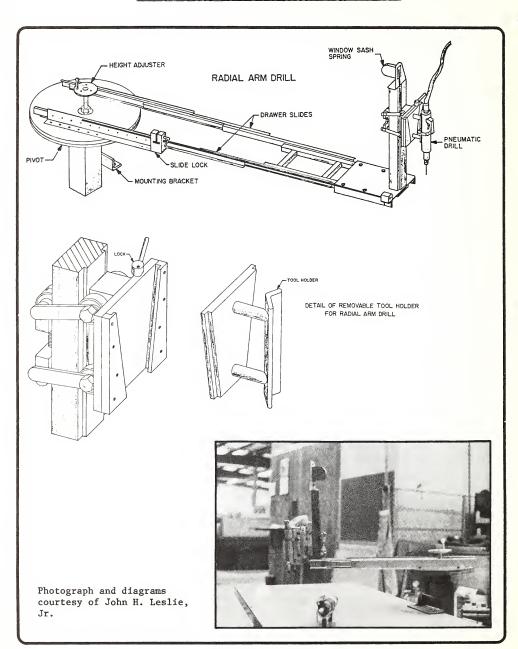
no

HOW IT WORKS

The holes in the square bar each represent one degree. The hole closest to center is one degree. The next hole out is two degrees, etc. The holes in the plate represent a set of degrees. The first set is from 1-10, the second from 11-20, third from 21-30, etc. To arrive at 45° , the pin is placed in the fifth hole on the bar. It will then engage only holes that represent 5, 15, 25, 35, 45, 55, 65, etc. As the user counts the holes it meets, the first would be 5° , the second 15° , the third 25° , the fourth 35° , and the fifth set 45° .

(Information based on personal communication with Jerome Golner.)

RADIAL ARM ASSISTIVE DEVICE FOR HAND HELD TOOLS



Rehabilitation Engineering Center 2021 North Old Manor Wichita, KS 67208 (316) 688-1888

CONTACT PERSON

Leonard Anderson Rehabilitation Engineering Center 2021 North Old Manor Wichita, KS 67208 (316) 688-1888 WHERE IT IS USED

Machine Trades

PROBLEM(S) IT OVERCOMES

difficulty locating and holding a drill in a given position to provide a perpendicular hole

FIELD TESTED

yes

Center Industries Corporation - Wichita, KS

REGULATORY APPROVAL

information not provided

WARRANTY PROVIDED

not applicable

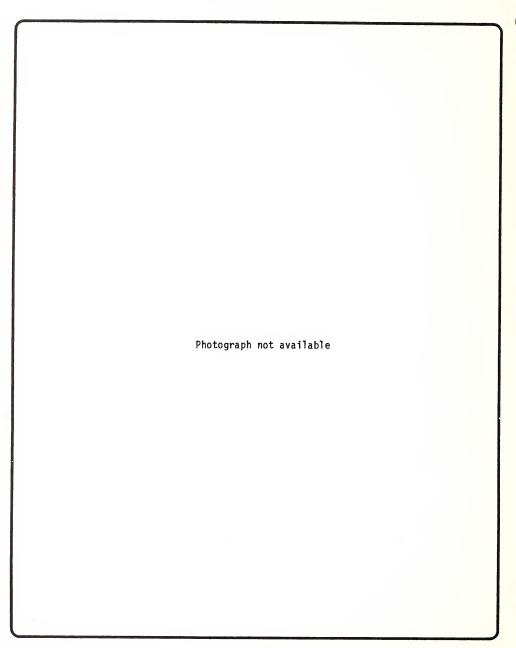
FOR SALE

no

HOW IT WORKS

This device was designed and constructed to provide a means of holding a drill or powered hand tool perpendicular to a work surface while still giving the operator complete freedom of movement. It provides rigidity and perpendicularity so that the user can drill accurate holes or utilize a riveter accurately. This tool holder converts a hand drill or hand tool into a radial arm device. The radial arm is not limited to any arch of movement and has in and out travel of approximately 24 inches. The drill fixture is mounted on slide with a vertical movement of approximately 7 inches. This unit is not a true radial arm drill as it only assists the user in positioning and holding the tool. A carriage was constructed to allow instant change of tools. Each tool is mounted on a tool holder and is secured to the holder by a worm gear clamp. The tool holder fits into a receptacle on the carriage.

(Information provided by John H. Leslie, Jr., Rehabilitation Engineering Center)



Clinical Convenience Products Contracting Serv. Div. 2070 Helena Street Madison, WI 53704 (608) 251-2882

CONTACT PERSON

Don Warren 2070 Helena Street Madison, WI 53704 (608) 251-2882

WHERE IT IS USED

Safety Sawing Lumber

PROBLEM(S) IT OVERCOMES

allows individuals to feed stock lumber into a preset (length) saw with accuracy and speed while allowing the individual to operate at a safe distance from the cutting blade

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

no

FOR SALE

Clinical Convenience Products 2070 Helena Street Madison, WI 53704

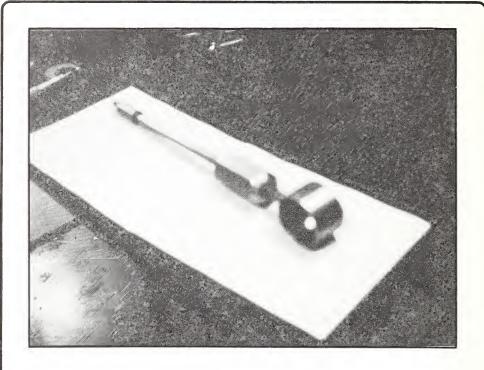
Price dependent upon equipment requirements.

HOW IT WORKS

Radial arm saw was modified using pneumatic cylinder arms and clamps that would position board to be cut by holding a board against the preset stop guide, the table and the saw guide. Once board is in place the radial arm automatically operates, cutting the positioned board. After the saw returns, the clamps release the board and the cut off part is automatically ejected and sets saw for next operation cycle.

(Information provided by Ricardo Cerna, Rehabilitation Engineering Specialist, Wisconsin Division of Vocational Rehabilitation, and Don Warren.)

SLIDE HAMMER



Photograph courtesy of John Gugerty, WVSC

Jerome Golner Golner Precision Products 354 Cottonwood Avenue Hartland, WI 53029

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Machine Trades: Screw Machine Operation

PROBLEM(S) IT OVERCOMES

possibility of self injury to a blind employee when tightening and loosening inner collect on a hand screw machine or when performing many other pounding tasks

FIELD TESTED

yes

used in one factory by one blind employee who also has no right wrist or hand

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

no

FOR SALE

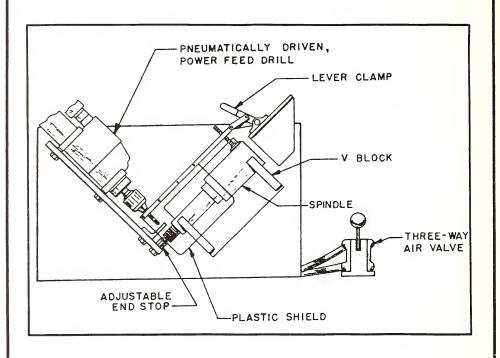
no

HOW IT WORKS

The blind employee places the pointed end of the slide hammer in one of the indentations of the inner collet, puts one hand through the hollow ring, and uses the sliding weight to transmit the force needed to tighten or loosen the collet.

(Information based on personal communication with Jerome Golner.)

SPINDLE DRILLING FIXTURE



Photograph courtesy of John H. Leslie, Jr.

SPINDLE DRILLING FIXTURE

DEVELOPER

Rehabilitation Engineering Center 2021 North Old Manor Wichita, KS 67208 (316) 688-1888

CONTACT PERSON

Leonard Anderson Rehabilitation Engineering Center 2021 North Old Manor Wichita, KS 67208 (316) 688-1888 WHERE IT IS USED Machine Trades

PROBLEM(S) IT OVERCOMES

fine motor positioning required to position a cylinderical part in correct relationship to the drilling operation

FIELD TESTED

yes

Center Industries Corporation - Wichita, KS

REGULATORY APPROVAL

OSHA

WARRANTY PROVIDED

not applicable

FOR SALE

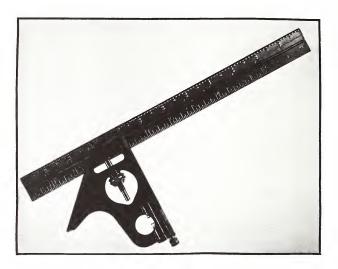
no

HOW IT WORKS

The drill fixture was designed so that a cylinderical part, in this case a spindle, is positioned at a 45° angle to the work surface. The spindle was supported in the fixture by V-blocks and by an adjustable end stop. The 45° angle positioning allows the spindle to slide against the adjustable end stop for the accurate drill position. During the drill operation, a simple lever clamp holds the spindle securely in the V-blocks. To drill the spindle, the spindle is placed in the drill fixture and is automatically located due to gravity which positions it against the end stop. The lever holding the clamp is secured and the drill operation is activated by a three way air valve. The pneumatically powered drill sequences through the drill and retract operations. The lever clamp is released and the spindle is removed from the drill fixture and set aside for inspection. This device could be used to drill any cylinderical part accurately and in a short period of time. One handed capability is all that is necessary to operate the device.

(Information provided by John H. Leslie, Jr., Rehabilitation Engineering Center.)

STANLEY COMBINATION SQUARE



Photograph courtesy of American Foundation for the Blind

CONTACT PERSON

Alex H. Townsend American Foundation for the Blind 15 West 16th Street New York, NY 10011 (212) 620-2169

WHERE IT IS USED

Benchwork Construction

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

American Foundation for the Blind 15 West 16th Street New York, NY 10011 \$21.00

HOW IT WORKS

This tool combines the equivalent of several tools. It can be used as a straight edge rule (by removing the handle), an outside tri-square, an inside tri-square, a mitre square, a depth gauge and a marking gauge. There is a single raised dot every 1/8", double raised dots at every $\frac{1}{2}$ " and three raised dots at every 1" for the entire length of the scale. It includes a level and a scriber, the scriber being kept in the bottom of the handle.

(Information based on American Foundation for the Blind literature.)

STANLEY DRILL GUIDE



Photograph courtesy of American Foundation for the Blind

CONTACT PERSON

Alex H. Townsend American Foundation for the Blind 15 West 16th Street New York, NY 10011 (212) 620-2169

WHERE IT IS USED

Benchwork Construction Machining Structural Work

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

American Foundation for the Blind 15 West 16th Street New York, NY 10011 \$7.50

HOW IT WORKS

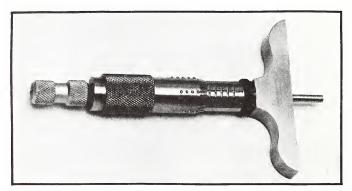
This device has 13 set positions to permit the user to drill an accurately-centered hole perpendicular to any surface. Ideal for work on metal, wood or plastic. It has a non-slip base for more accurate gripping and the handle has a drill bit storage compartment.

(Information based on American Foundation for the Blind literature.)

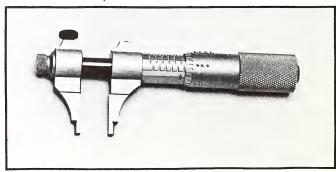
STARRETT MICROMETERS



Standard Starrett Micrometer



Starrett Depth Micrometer



Starrett Inside Micrometer

Photographs courtesy of American Foundation for the Blind

CONTACT PERSON

Alex H. Townsend American Foundation for the Blind 15 West 16th Street New York, NY 10011 (212) 620-2169

WHERE IT IS USED

Benchwork Construction Machining

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

American Foundaton for the Blind 15 West 16th Street New York, NY 10011 \$105.00 to \$120.00

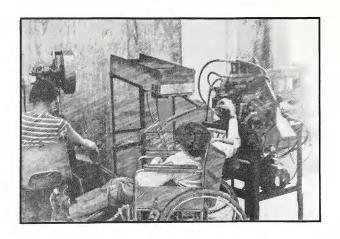
HOW IT WORKS

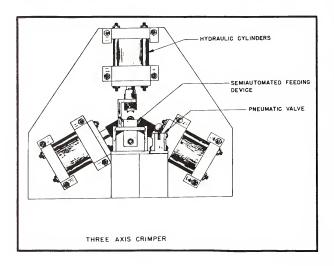
The Standard Starrett Micrometer has been adapted for tactual reading. Graduations have been deepened and raised dots have been added. The .100" graduations appear only over the zero line. The .050" markings are carried below the zero line, while the .025" and .075" markings appear above the zero line. Thus an operator can quickly determine in which .025" division the measurement falls and can then determine the final measurement to within a thousandth of an inch. There are no numeral markings. The Starrett Depth Micrometer features interchangeable rods providing 0" to 3" measurements. It incorporates the same system described above.

The Starrett Inside Micrometer provides precise measurements of interior dimensions and has a barrel similar to that of the Standard and Depth Micrometers.

(Information based on American Foundation for the Blind literature.)

THREE AXIS CRIMPER





Photograph and Diagram courtesy of John H. Leslie, Jr.

THREE AXIS CRIMPER

DEVELOPER

Rehabilitation Engineering Center 2021 North Old Manor Wichita, KS 67208 (316) 688-1888

CONTACT PERSON

Leonard Anderson Rehabilitation Engineering Center 2021 North Old Manor Wichita, KS 67208 (316) 688-1888 WHERE IT IS USED

Machine Trades

PROBLEM(S) IT OVERCOMES

fine motor tasks related to materials handling and parts positioning are eliminated

FIELD TESTED

ves

Center Industries Corporation - Wichita, KS

REGULATORY APPROVAL

OSHA

WARRANTY PROVIDED

not applicable

FOR SALE

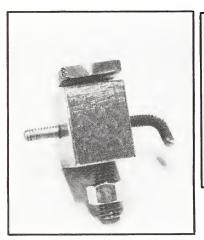
no

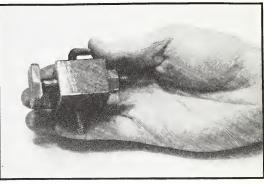
HOW IT WORKS

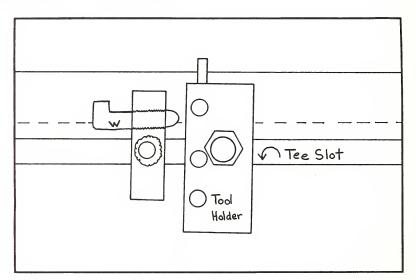
The device is designed to crimp a cylinderical tube at 120° intervals. A semiautomatic feeding device was designed in order to feed the operator one tube at a time to alleviate materials handling problems. An additional semiautomatic feeding device was also developed that would position the tube over the forming mandrel and remove it after forming. To operate the machine, the operator places the tube in a cradle of the feeding device, activates a pneumatic valve and disposes of the tube after forming. The activation of the pneumatic valve begins the process with electronic hardware sequencing the feeding, forming and retraction opera-

The parts feeder mechanism could be used wherever cylinderical tubing is utilized.

(Information provided by John H. Leslie, Jr., Rehabilitation Engineering Center.)







Photographs courtesy of Jeff Hamm, WVSC, diagram redrawn by Terri Bleck, WVSC

Jerome Golner Golner Precision Products 354 Cottonwood Avenue Hartland, WI 53029

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Machine Trades: Lathe Operation

PROBLEM(S) IT OVERCOMES

moving a lathe's tool holder precisely when one cannot see

FIELD TESTED

yes

used in one factory by one blind employee

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

no

FOR SALE

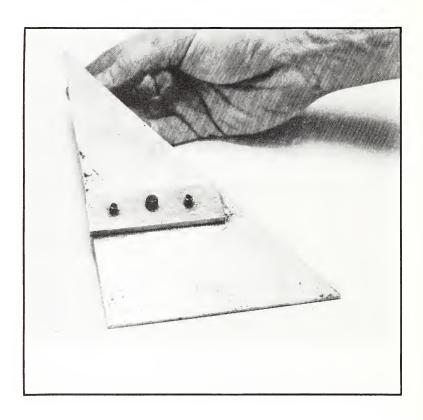
no

HOW IT WORKS

The tool adjusting block can be clamped at the side of a tool holder and 1/4-20 screw can be advanced or retracted to give accurate tool holder movement. For example, to move the tool holder .050 to the right, clamp the tool adjusting block next to the tool holder, turn the 1/4-20 screw until it touches the holder. Loosen the tool holder, advance the 1/4-20 screw one turn, and retighten tool holder.

(Information based on personal communication with Jerome Golner.)

TRIANGLE, LATHE SET-UP



Photograph courtesy of Jeff Hamm, WVSC

TRIANGLE, LATHE SET-UP

DEVELOPER

Jerome Golner Golner Precision Products 354 Cottonwood Avenue Hartland, WI 53029

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Machine Trades: Lathe Operation

PROBLEM(S) IT OVERCOMES

lining up the compound on a 10" lathe when one cannot see

FIELD TESTED

ves

used in one factory by one blind employee

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

no

FOR SALE

no

HOW IT WORKS

The triangle is made to line up the compound on a lathe (10" South Bend in this case). If the "tee slot key" is inserted in the lath's compound "tee slot", the edge of the triangle can be brought up against the lathe's chuck, thus either aligning it at zero degrees, 30 degrees, or 90 degrees. Another triangle is used for other angles, such as 15 degrees, 35 degrees, 45 degrees, etc.

(Information based on personal communication with Jerome Golner.)

VISUAL PROCESS INSPECTION STATION



Photograph courtesy of John H. Leslie, Jr.

Rehabilitation Engineering Center 2021 North Old Manor Wichita, KS 67208 (316) 688-1888

CONTACT PERSON

Leonard Anderson Rehabilitation Engineering Center 2021 North Old Manor Wichita, KS 67208 (316) 688-1888

WHERE IT IS USED

Machine Trades

PROBLEM(S) IT OVERCOMES

examining plates with numbers upside down and backwards; difficulty handling materials

FIELD TESTED

ves

Center Industries Corporation - Wichita, KS

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

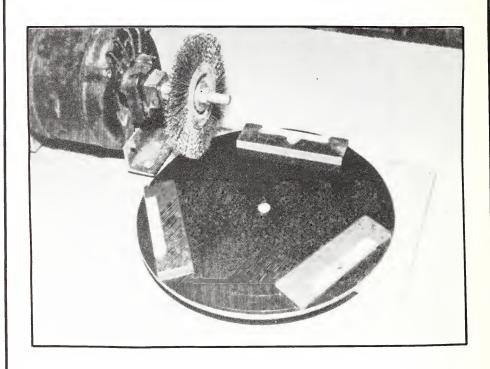
FOR SALE

no

HOW IT WORKS

License plates were manufactured and, after processing, were disposed on a conveyor line upside down and backwards. In order to allow a severely handicapped person to inspect the plates, a mirror was installed at an approximate 60° angle in front of the person. This allowed the inspector to look at the mirror image of the license plates rather than the upside down and backwards configuration coming out of the punch press process. The mirror was tilted at an angle such that the inspector could view the tag comfortably while seated in a wheelchair. An air jet under the control of the inspector was directed across the line perpendicular to the direction of the motion of the conveyor line. A scrap metal container was located on the opposite side of the line from the air jet to receive the rejected product. The air jet was controlled by means of an electrically operated solenoid valve. This allowed the inspector to inspect the quality of the license plates and to reject them by pushing a button activating the air solenoid.

(Information provided by John H. Leslie, Jr., Rehabilitation Engineering Center.)



Photograph courtesy of California Department of Rehabilitation

Charles Eckles Independent Contract Consultant (213) 360-4180

CONTACT PERSON

California Department of Rehabilitation 830 "K" Street Mall Sacramento, CA 95814 (916) 322-8500

WHERE IT IS USED

Cleaning

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

HOW IT WORKS

Wire brushing by hand is not a practical method for cleaning such materials as containers of tile grout, as pictured on the opposite page. A motorized wire brush and rotary positioning table, shown in the photo can be used for brushing, cleaning and finishing the tile samples. The fine strand wire wheel brush is attached to a bench mounted motor. The tiles are then fixed on a turntable and moved by hand under the brush for as long as necessary to do the finishing job.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)



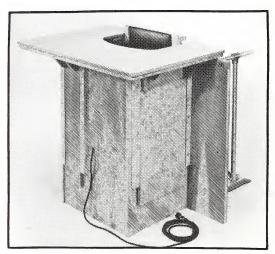
MAINTAINING BALANCE

Adult Stand-In Table	•	•	•	440
Foot Harness				442
LaBerne Gear Lift Stand-In Table .	•			444
Levo $^{ extsf{TM}}$ Stand-Up $^{ extsf{TM}}$ Wheelchair \dots				446
"Mainstream" Elevating Wheelchair		•		448
Portable Standing Frame				450
Standing Platform				452

ADULT STAND-IN TABLE



Hydraulic



Electric

Photographs courtesy of Hausmann Industries

Hausmann Industries 130 Union Street Northvale, NJ 07647 (201) 767-0255

CONTACT PERSON

Rose Rowan Advertising Manager Hausmann Industries 130 Union Street Northvale, NJ 07647 (201) 767-0255

WHERE IT IS USED

Any job that requires sustained standing

PROBLEM(S) IT OVERCOMES

confinement to a wheelchair

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

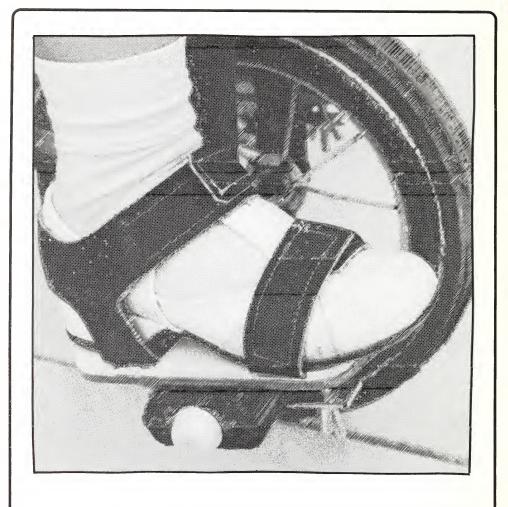
Hausmann Industries 130 Union Street Northvale, NJ 07647

HOW IT WORKS

Designed for adult use, the table top surface, 32" x 42" with an 18" cut-out, is made of stainproof heavy gauze plastic. The top can be raised or lowered electrically and automatically to any desired height from 40" to 60" while the user is held securely in a standing position by the rigid back panel. The table also has a backrest, an adjustable knee support, parallel bars and an inclined sure-grip rubber matted platform. A hydraulically operated model is also available.

(Information based on Hausmann catalog.)

FOOT HARNESS



Photograph courtesy of Consumer Care Products, Inc.

Terrand B. Grall Route 3 Sheboygan Falls, WI 53085 (414) 467-2393

CONTACT PERSON

Sue Windeck - Light Foot School 111 First Street Sheboygan Falls, WI 53085 Sue Persch - Curative Workshop of Milwaukee Milwaukee, WI 53226

WHERE IT IS USED

Sedentary Work

PROBLEM(S) IT OVERCOMES

foot positioning

FIELD TESTED

yes

Light Foot School - Sheboygan Falls, WI Curative Workshop of Milwaukee-Mil., WI

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

yes

FOR SALE

Consumer Care Products Inc. Sheboygan Falls, WI 53085 or Achievement Products

P.O. Box 547 Mineola, NY 11501

\$57.00 a pair as of January, 1980

HOW IT WORKS

Each harness has three parts: a leather toe strap with "velcro fasteners"; a leather ankle-heel strap with "velcro fasteners" and a laminated foot pad with attachment bar, bolts and wing nuts. It is available in three sizes - $1\frac{1}{4}$ " - $2\frac{1}{4}$ " wide x $3\frac{1}{4}$ " - 6" long; $2\frac{1}{2}$ " - $3\frac{1}{2}$ " wide x 6" - $9\frac{1}{4}$ " long or $3\frac{1}{2}$ " - $4\frac{1}{4}$ " wide x $9\frac{1}{4}$ " long. The user can strap a foot in using one hand. It can be used with or without a shoe.

(Information based on Consumer Care Products, Inc. literature.)

LABERNE GEAR LIFT STAND-IN TABLE



Photograph courtesy of LaBerne Manufacturing Co., Inc.

W. E. Berne P.O. Box 9245 Columbia, SC 29290 (803) 776-1115

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Any job that requires sustained standing

PROBLEM(S) IT OVERCOMES

confinement to a wheelchair

FIELD TESTED

yes

in use in physical therapy departments all over U.S.A. and abroad

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

ves

FOR SALE

LaBerne Manufacturing Co., Inc. P.O. Box 9245 Columbia, SC 29290 \$895.00 F.O.B. Columbia, SC

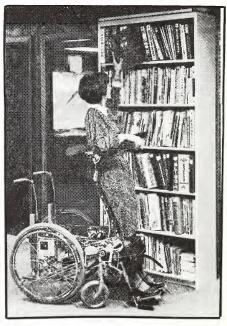
HOW IT WORKS

The table is designed for people who have extremity paralysis. It has a hip and back harness, adjustable padded knee and chest supports and an adjustable back support. The top measures 29"x29"x43" and has a cut-out. A harness is placed around the user who is lifted from the wheelchair to a standing position by turning the gear crank which automatically locks the user into the standing position. The user is returned to the chair in the same way. It is made of tubular steel and uses an enclosed worm gear. An electric model is also available.

(Information based on LaBerne catalog, September, 1978.)

LEVOTM STAND-UPTM WHEELCHAIR





Photographs courtesy of American Stair-Glide Corporation

American Stair-Glide 4001 E. 138th St. Grandview, MO 64030 (816) 763-3100

CONTACT PERSON

Sales Section American Stair-Glide 4001 E. 138th St. Grandview, MO 64030 (816) 763-3100

WHERE IT IS USED

Any job that requires sustained standing

PROBLEM(S) IT OVERCOMES

confinement to a wheelchair

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

ves

FOR SALE

American Stair-Glide Corporation 4001 E. 138th St. Grandview, MO 64030

Price quoted by dealer. Contact American Stair-Glide for location of nearest dealer.

HOW IT WORKS

LEVOTM is a manual wheelchair with a lifting device activated by 10 D-cell nickel cadmium batteries. At the touch of a constant-pressure switch located in the armrest, the user is lifted to the desired height up to a standing position, and returned to a sitting position. A velcro-fastened chest strap and a padded leg support with a belt and buckle, secure the user while standing. The chair is designed to support up to 200 lbs. It folds for storage and transport.

(Information based on American Stair-Glide Corporation literature.)

"MAINSTREAM" ELEVATING WHEELCHAIR





Photographs courtesy of Summit Services

Summit Services 535 Division Street Campbell, CA 95008 (408) 378-1251

CONTACT PERSON

William Redmond Glenn Brown Summit Services 535 Division Street Campbell, CA 95008 (408) 378-1251

WHERE IT IS USED

Manufacturing Technical

PROBLEM(S) IT OVERCOMES

inaccessibility of many educational and work environments; this wheelchair

FIELD TESTED

ves

REGULATORY APPROVAL

FDA

WARRANTY PROVIDED

ves

FOR SALE

535 Division Street Campbell, CA 95008

Summit Services

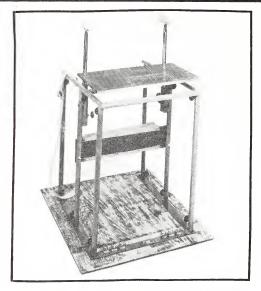
approximately \$3,000.00

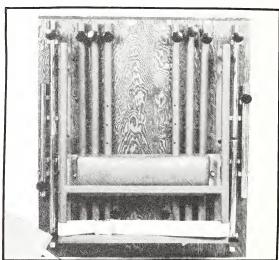
HOW IT WORKS

The following information was provided by Robert N. Brown, Chairman, Division of Technology and Engineering, Chabot College: By using this device, you adapt the person to any environment. At Chabot College it would have cost \$15,000.00 to just adapt our machine shop, not to mention our chemistry, biology, physics and photo labs. However, with a few of these chairs on campus we adapt each wheelchair user to any environment. The chair is comfortable, safe, easy rolling and electrically controlled as to up and down. The purpose of the device is to allow persons to train on normal equipment and in normal labs so that they can go easily out into industry or business and assume high paying jobs. The "Mainstream Elevating Wheelchair" is manually operated with handwheels (same manner as conventional wheelchairs) but the seat, handwheels and footrest electronically elevate 18 inches above conventional wheelchair height. This design feature permits the occupant to be "fully mobile" at any height they wish or need to be to perform functions the same as a standing person.

This wheelchair is extremely stable at all heights and its maneuverability is excellent in small areas because it is no wider than conventional wheelchairs but in the full-up position it is 6 inches shorter due to the fact that the footrest tucks under the seat as it rises.

(Information provided by Robert N. Brown.)





Photographs courtesy of Arthur L. Castor

Frame in folded position.

PORTABLE STANDING FRAME

DEVELOPER

Arthur L. Castor 1409 W. 156th Street Compton, CA 90220 (213) 637-0891

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Any job that requires sustained standing

PROBLEM(S) IT OVERCOMES

standing with needed support

HOW IT WORKS

Security belts strap the person to the frame and an adjustable board provides a work surface. The unit folds up for transport and storage.

(Information based on Castor Company literature.)

FIELD TESTED

yes

Veterans Administration - Brooklyn, NY

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Arthur L. Castor Company 1409 W. 156th Street Compton, CA 90220

STANDING PLATFORM



Photographs courtesy of Jayfro Corporation

Jayfro Corporation P.O. Box 400 Waterford, CT 06385 (203) 447-3001

CONTACT PERSON

Jim Bliss Jayfro Corporation P.O. Box 400 Waterford, CT 06385 (203) 447-3001

WHERE IT IS USED

Standing

PROBLEM(S) IT OVERCOMES

standing balance

FIELD TESTED

ves

Seaside Regional Center - Waterford, CT

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

P.O. Box 400 976 Hartford Turnpike Waterford, CT 06385 \$263.00 with knee support pad F.O.B. Waterford, CT

Jayfro Corporation

HOW IT WORKS

Designed in consultation with recreation and physical therapists, the unit is designed to assist standing balance without limiting use of the upper extremities. It is made of lightweight, heavy-duty aluminum with a footplate to prevent slipping and a knee support pad for those unable to maintain positioning while weight bears on the lower extremities. Both the padded back rest and knee support have straps and are height adjustable.

(Information based on Jayfro Corporation catalog.)



MATHEMATICS

Calculator, Expanded Keyboard	456
Calculator Guide	458
Calcu-Tac	460
Canon Electronic Calculator with	
Printout, Display and Voice	462
Graphic Aid for Mathematics \dots .	464
Keyboard Guard	466
Scientific Calculator Braille	468
Speech Plus Talking Calculator	470

CALCULATOR, EXPANDED KEYBOARD

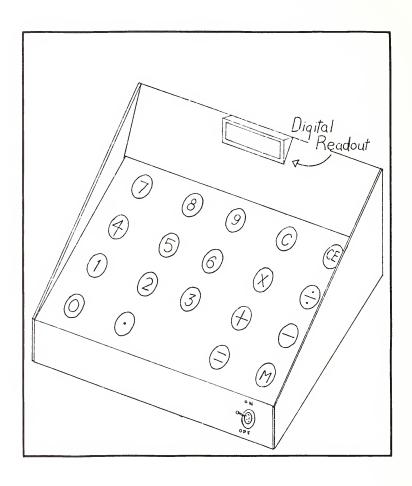


Illustration courtesy of Carol Schaeffler

Carol Schaeffler John Mauro United Cerebral Palsy 622 Foster Avenue Brooklyn, NY 11230 (212) 859-8850

CONTACT PERSON

Carol Schaeffler United Cerebral Palsy Rehabilitation Engineering Department 622 Foster Avenue Brooklyn, NY 11230 (212) 859-8850

WHERE IT IS USED Mathematics

PROBLEM(S) IT OVERCOMES

it allows individuals who lack fine motor skills to operate commercially available calculators

FIELD TESTED

yes

in process at United Cerebral Palsy, Inc.

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

FOR SALE

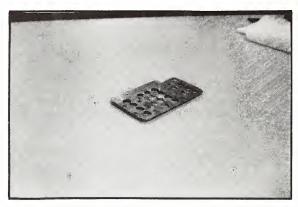
no

HOW IT WORKS

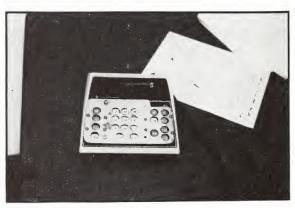
Using the basic circuitry of a commercially available calculator, an enlarged keyboard measuring 16x18 inches was constructed. The keys are one inch in diameter, widely spaced and recessed. Slight pressure on a key actuates the desired function. The display readout was enlarged to $\frac{1}{2}$ inch symbols and relocated on top of the keyboard to facilitate viewing the readout.

(Information provided by Carol Schaeffler.)

CALCULATOR GUIDE



Calculator guide with side stands



Calculator guide in place on calculator

CALCULATOR GUIDE

DEVELOPER

Dan Golden
CETA Welding Instructor
Wisconsin Indianhead
Technical Institute
New Richmond Campus
1019 South Knowles Ave.
New Richmond, WI 54017
(715) 246-6561

CONTACT PERSON Jeanette M. Richardson, Supervisor Office & Marketing Education Department WITI-New Richmond Campus 1019 South Knowles Ave. New Richmond, WI 54017 (715) 246-6561

WHERE IT IS USED When using calculator

PROBLEM(S) IT OVERCOMES

limited hand dexterity and control

FIELD TESTED

ves

in use at WITI - New Richmond

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

FOR SALE

May be made at a minimal cost.

HOW IT WORKS

When the guide is placed exactly over the keys of the calculator, screws, in the guide, are used to attach it to the calculator. (Holes were previously drilled into the calculator.) The guide makes it possible to accurately press the intended keys, eliminating the problem of depressing the wrong key or two keys because of limited control. Side stands allow the guide to be held off of the calculator.

(Information based on personal interview.)

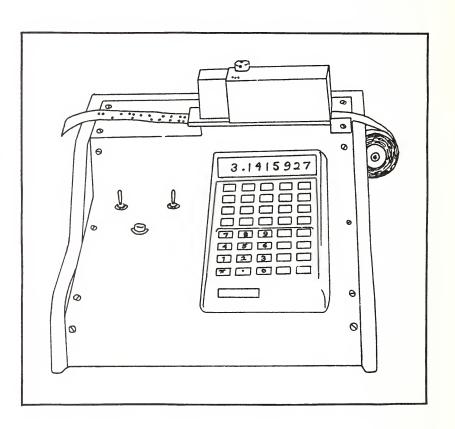


Illustration courtesy of Science for the Blind Products

CONTACT PERSON

Tom Benham Science for the Blind Products Box 385 Wayne, PA 19087 (215) 687-3731 WHERE IT IS USED

Mathematics

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Science for the Blind Products Box 385 Wayne, PA 19087 \$895.00

HOW IT WORKS

The Calcu-Tac is an electronic calculator with a braille printout. Calculations are performed on an electronic calculator. Whenever a printout is required, a "print" button is pressed and the braille printer prints all the numbers in the display in proper sequence including decimals.

(Information based on Science for the Blind literature.)



Photograph courtesy of Canon, U.S.A., Inc.

CANON ELECTRONIC CALCULATOR WITH PRINTOUT, DISPLAY AND VOICE

DEVELOPER

Canon, U.S.A., Inc. Head Office 10 Nevada Drive, Lake Success Long Island, NY 11042 (516) 488-6700

CONTACT PERSON

WHERE IT IS USED

Bookkeeping Mathematics

PROBLEM(S) IT OVERCOMES

inability to see calculated numbers

FIELD TESTED

yes

REGULATORY APPROVAL

yes

Underwriters' Laboratory

WARRANTY PROVIDED

yes

FOR SALE

see distributor list in appendix suggested list price \$399.00

HOW IT WORKS

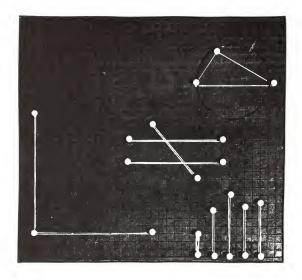
In addition to a visual printout and display, this calculator has the following capabilities:

- Voice synthesizer calls out keyboard entries
- A key vocally repeats the steps of calculations
- A key automatically produces any number of duplicate printouts
- Simple reentry of individual data items for quick error correction.

The unique voice synthesizer calls out numerals and functions as they are keyed in, or reads out data stored in the memory. The voice snythesizer is available in English, French, German and Japanese languages. Two switches control the speed and volume of the sound verification.

(Information reprinted with permission from Canon literature.)

GRAPHIC AID FOR MATHEMATICS



Photograph courtesy of American Printing House for the Blind

Manufactured by: American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206

CONTACT PERSON

Ralph E. McCracken American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206 (502) 895-2405

WHERE IT IS USED

Education

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

U.S. Department of Health, Education and Welfare

WARRANTY PROVIDED

information not available

FOR SALE

American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206 \$21.00

HOW IT WORKS

This consists of an 18"x19"x1" cork composition board, 3 flat spring wires, 14 plastic-headed pushpins and a supply of rubber bands. These are used in the construction of geometrical and other mathematical figures necessary for study of arithmetic, algebra, geometry, trigonometry and calculus.

(Information based on American Printing House for the Blind literature.)

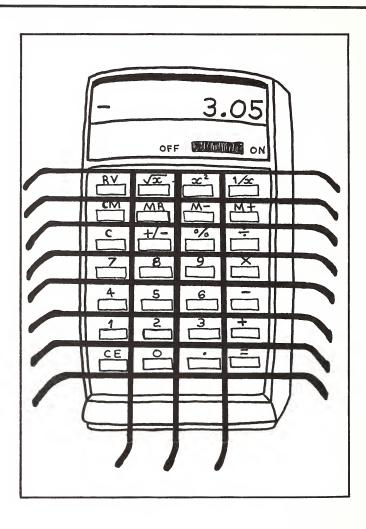


Diagram courtesy of Ken Hagmann, redrawn by Terri Bleck, WVSC

Ken Hagmann Opportunities, Inc. 925 Jefferson Street Ft. Atkinson, WI (414) 563-6691

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Communicating Mathematics Typing

PROBLEM(S) IT OVERCOMES

motor control problems when using a keyboard

HOW IT WORKS

The removable grid is constructed out of 1/16" diameter brass rod with soldered joints. It can be made for calculators, typewriters and push button phones. This particular type was made to fit 4 calculators in our facility and to be easily switched from one to another, (commercially available ones are not).

(Information provided by Ken Hagmann.)

FIELD TESTED

yes

REGULATORY APPROVAL

not applicable

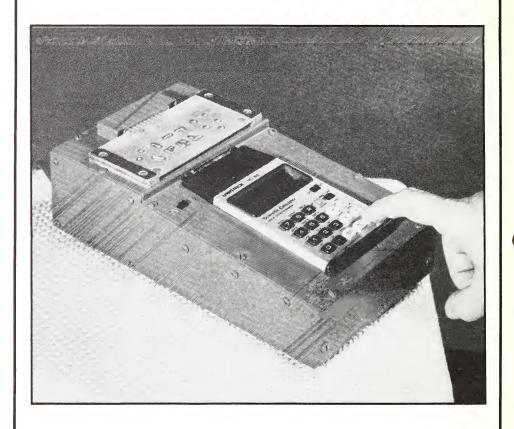
WARRANTY PROVIDED

not applicable

FOR SALE

no

SCIENTIFIC CALCULATOR BRAILLE



Photograph courtesy of J.C. Swail

SCIENTIFIC CALCULATOR BRAILLE

DEVELOPER

J.C. Swail National Research Council M-50 Dee R182 Montreal Road Ottawa Ontario Canada K1A OR8

CONTACT PERSON

Same as Developer

WHERE IT IS USED Education
Mathematics

PROBLEM(S) IT OVERCOMES

visual impairment

HOW IT WORKS

A standard calculator is placed in a unit which presents braille symbols through a combination of touch and sound. There are no moving parts. The same readout can be interfaced to any digit output.

(Information provided by J.C. Swail, N.R.C.)

FIELD TESTED

yes

Canadian N'tl Institute for the Blind-Edmonton; Service Converto Braille Hall-Province of Ouebec, Canada

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

no

SPEECH PLUS TALKING CALCULATOR



Photograph courtesy of Telesensory Systems Inc.

Telesensory Systems, Inc. 3408 Hillview Avenue Palo Alto, CA 94304 (415) 493-2626

CONTACT PERSON

Gayle Bruglar Telesensory Systems, Inc. 3408 Hillview Avenue Palo Alto, CA 94304 (415) 493-2626

WHERE IT IS USED

Bookkeeping Education Home Economics Mathematics

PROBLEM(S) IT OVERCOMES

blindness

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

ves

FOR SALE

Telesensory Systems, Inc. 3408 Hillview Avenue Palo Alto, CA 94304 \$445.00

HOW IT WORKS

The Speech Plus Calculator brings the speed and efficiency of calculator computation to blind people. The calculator's 24 word vocabulary, pronounced in clear electronic speech, provides verification of every keystroke and the results of computations. The Speech Plus Calculator is available in English, French, German and Arabic speaking models. People using the Speech Plus Calculator as a tool in mathematics curriculum find mathematics far more useful. Adults use the calculator to better manage business enterprises and personal finances.

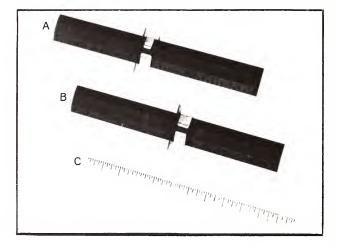
(Information reprinted with permission from Telesensory Systems Inc. literature.)



MEASURING

Braille Rulers	474
Cutting Lengths of Yarn	476
Cutting Material to Length	478
Rulers	480
Wire Measuring System with Voice Feedback	482

BRAILLE RULERS



Photograph courtesy of American Printing House for the Blind

Manufactured by: American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206

CONTACT PERSON

Ralph E. McCracken American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206 (502) 895-2405

WHERE IT IS USED

Mathematics Measuring

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

U.S. Department of Health, Education and Welfare

WARRANTY PROVIDED

information not available

FOR SALE

American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206

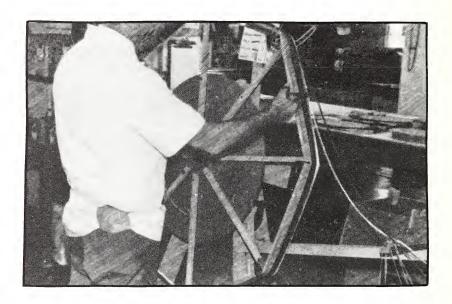
English Measurement Ruler - \$1.65 Metric-English Ruler - \$1.70 APH Glue-down Rule- \$.50

HOW IT WORKS

The 1-foot English measurement ruler (A) is made of molded black plastic. Inches and fractions are indicated by raised lines, and braille figures are located at the inch divisions. A caliperslide is included for determination of measurements. The 1-foot Metric-English Measurement Ruler (B) is also made of molded black blastic. The 1- and 1/2centimeter intervals are indicated on the scale opposite the English-measure ment scale. Braille numbers indicate 2 centimeter marks. The APH Glue-Down Rule (C), is made of a brass strip 12" wide, .01" thick and 12" long. Raised lines indicate the divisions of the rule. Rule may be bonded to sewing machines, band saws, foot shears, cutting or drawing boards, etc. Epoxy glue is recommended.

(Information based on American Printing House for the Blind literature.)

CUTTING LENGTHS OF YARN



Photograph courtesy of California Department of Rehabilitation

Charles Eckles Independent Contract Consultant (213) 360-4180

CONTACT PERSON

California Department of Rehabilitation 830 "K" Street Mall Sacramento, CA 95814 (916) 322-8500

WHERE IT IS USED

Measuring

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

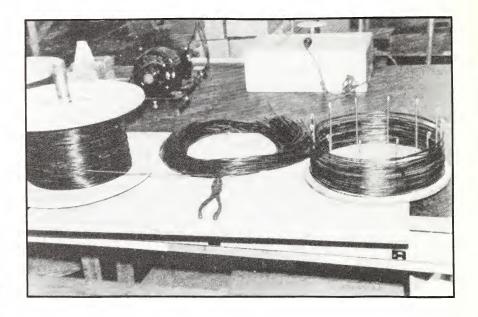
May be made at a minimal cost.

HOW IT WORKS

This device aids in cutting yarn in different lengths for packaging. A large wheel-type spoked frame, mounted on a tripod, is used. The flat exterior rim has a 15-foot circumference, which is the length of the shortest piece of yarn to be cut. Six strands of different yarns are pulled from a spool supply rack through a series of guides that feed the yarn onto the exterior rim of the wheel as it is turned. For other lengths of yarn, the operator can refer to a chart to determine the number of turns required for each length. As the proper length is reached, the yarn is cut in that spot.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

CUTTING MATERIAL TO LENGTH



Photograph courtesy of California Department of Rehabilitation

Charles Eckles Independent Contract Consultant (213) 360-4180

CONTACT PERSON

California Department of Rehabilitation 830 "K" Street Mall Sacramento, CA 95814 (916) 322-8500

WHERE IT IS USED

Measuring

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

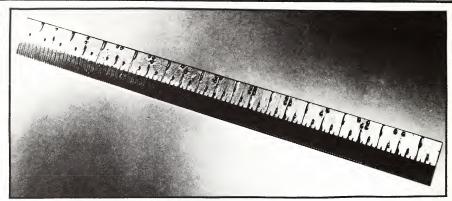
FOR SALE

May be made at a minimal cost.

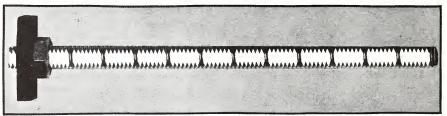
HOW IT WORKS

The equipment pictured here is for cutting many pieces of the same material at one time to a fixed length. Commercial equipment for measuring and cutting off electrical wire, lengths of rope, cord, hose, cable or similar stranded forms of material can be used and is relatively inexpensive. Accessory equipment for coiling lengths of measured material to various sized coils for packaging is also commercially available. The circumference of the pick-up reel is made to equal the length of material required. Approximately 50 wraps of material can be made on the winding wheel before it is to the top. The material is then cut along a common line and removed from the reel.

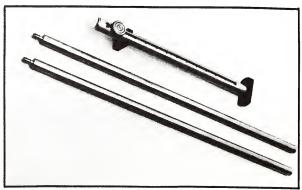
(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)



Ruler



The Rotomatic Rule



The Telescopic Click Rule

Photographs courtesy of American Foundation for the Blind

CONTACT PERSON

Alex H. Townsend American Foundation for the Blind 15 West 16th Street New York, NY 10011 (212) 620-2169

WHERE IT IS USED

Benchwork Clerical Construction Machining

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

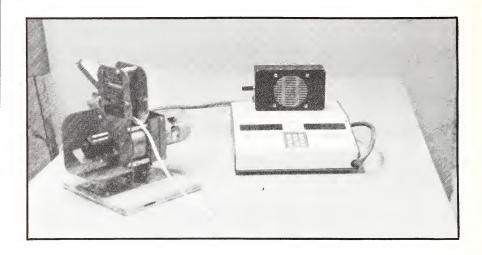
American Foundation for the Blind 15 West 16th Street New York, NY 10011 \$1.75 to \$40.00

HOW IT WORKS

The rulers are made from plastic, wood, steel, aluminum or brass. Most have raised lines or dots to indicate each increment of length. Some use slots or notches for this purpose. Units are available with scales in English, metric or both. The Rotomatic Rule consists of a 6" aluminum rod threaded at 16 threads per inch. One side of the rod has been milled flat and the opposite side has tactile markings every 1/2". The Telescopic Click rule is an anodized aluminum rule which clicks at each 1/16" and has raised graduations at each 3". Six inches from the starting end is a shoulder which allows inside measurement. Depth measurements and outside measurements can also be taken accurately to 1/16".

(Information based on American Foundation for the Blind literature.)

WIRE MEASURING SYSTEM WITH VOICE FEEDBACK



Photograph courtesy of Don Warren and Ricardo Cerna

Clinical Convenience Products Contracting Serv. Div. 2070 Helena Street Madison, WI 53704 (608) 251-2882

CONTACT PERSON

Don Warren 2070 Helena Street Madison, WI 53704 (608) 251-2882

WHERE IT IS USED

Measuring

PROBLEM(S) IT OVERCOMES

visual impairment; length of wire can be measured through vocal read out

FIELD TESTED

no

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

ves

FOR SALE

Clinical Convenience 2070 Helena Street Madison, Wisconsin 53704

price range - \$600 - \$1900, subject to requirements

HOW IT WORKS

System measures wire up to 3/4 inch diameter. Device can be programmed for length of wire to be measured and for the number of pieces to be cut. Once program is set, start button is pressed, wire is inserted into encoder and pulled through. Device speaks out the length of the wire being measured with a "STOP" command at end point. Operator interrogates system for status of both footage and number of pieces remaining to be measured.

(Information provided by Ricardo Cerna, Rehabilitation Engineering Specialist, Wisconsin Division of Vocational Rehabilitation, and Don Warren.)

MOBILITY

Aud-A-Vator .	•	•	•	•	•	•		•	•	•	•	•	486
Auditory Maps	•										•		488
Light Probe .						•	•	•	•	•			490
Memco Audible	L.	igh	ıt	Мє	ete	er		•	•	•			492
Mowat Sensor				•				•	•	•	•	•	494
Sonicguide .			•	•	•				•		•		496
Soniguide													498

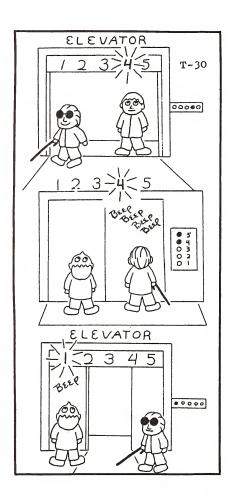


Illustration courtesy of Science for the Blind Products

CONTACT PERSON

Tom Benham Science for the Blind Products Box 385 Wayne, PA 19087 (215) 687-3731 WHERE IT IS USED

With elevators

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Science for the Blind Products Box 385

Wayne, PA 19087

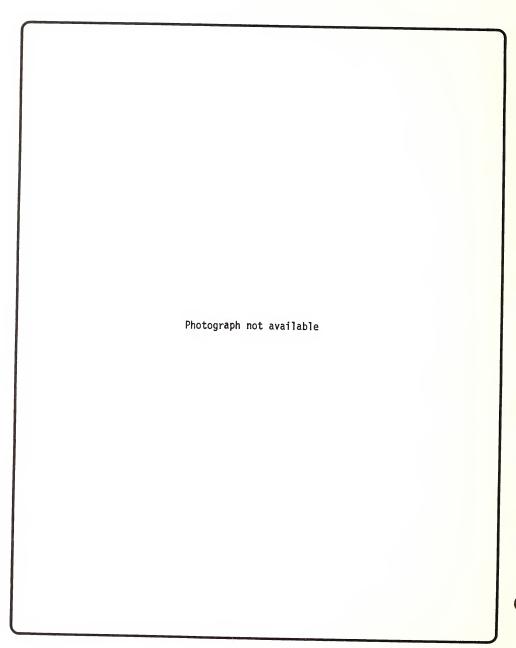
Price estimated between \$100 and \$200 per car plus installation.

HOW IT WORKS

The Aud-A-Vator is an elevator floor signaling device that indicates the floor at which the elevator stops by emitting a series of beeps. Installed easily on the roof of the elevator car by regular service personnel. It is ideal for buildings with 10 floors or less and useful up to 20 floors.

(Information based on Science for the Blind literature.)

AUDITORY MAPS



Bruce B. Blasch, Ph.D. Karen M. Todd Waisman Center Mobility Training Project 1500 Highland Ave. Madison, WI 53706 (608) 263-5916

CONTACT PERSON

McBurney Resource Center 75 Bascom Hall Madison, WI 53706 (608) 263-2741

WHERE IT IS USED

Orientation to specific travel areas or within buildings

PROBLEM(S) IT OVERCOMES

disorientation of a visually impaired traveller in an unfamiliar environment

FIELD TESTED

yes

University of Wisconsin-Madison

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

no

HOW IT WORKS

The University of Wisconsin-Madison Mobility Training Project's auditory maps, (recorded on cassette tapes), provide visually impaired persons travelling on campus, who are fully trained in the use of the cane or a guide dog, with a verbal description with which to orient themselves to a specific travel area, or with step-by-step instructions which will quide them to specific buildings or to particular rooms within campus buildings. The maps emphasize cues, such as cardinal directions, landmarks, texture changes in surfaces, inclines, declines, distance judgments, and environmental sounds. used by visually impaired persons who travel independently. Reference systems used in constructing the maps consist of ego-centric, topo-centric, cartographic and or polar-centric. The maps are recorded on cassette tapes for portability. Maps to any travel area or buildings can be made using the orientation cues described above.

(Information provided by Bruce Blasch and Karen M. Todd, University of Wisconsin-Madison.)



Photograph courtesy of American Foundation for the Blind

The Smith-Kettlewell
Institute Rehabilitation
Engineering Center
2232 Webster Street
San Francisco, CA 94115

CONTACT PERSON

Alex H. Townsend American Foundation for the Blind 15 West 16th Street New York, NY 10011 (212) 620-2169

WHERE IT IS USED

Wherever there is a light source

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

ves

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Manufacturer: San Francisco Lighthouse for the Blind 745 Buchanan Street San Francisco, CA 94102 \$40.00

Distributor: American Foundation for the

Blind \$50.00

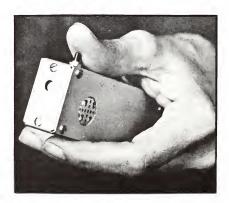
HOW IT WORKS

This small, lightweight probe has different audible pitches to distinguish the reflectivity of a surface. It can detect the presence of print and light and can therefore be used in occupations such as typing and switchboard work, as well as in detecting the on and off position of light. Adjustable sensitivity control allows for more flexible and reliable use.

(Information based on American Foundation for the Blind literature.)

MEMCO AUDIBLE LIGHT METER





Photographs courtesy of Applied Rehabilitation Systems Inc.

Marchak Engineering & Manufacturing Co. 6609 North Lamar Austin, TX 78752

CONTACT PERSON

Applied Rehabilitation Systems Inc. 3902 Idlewild Austin, TX 78731 (512) 459-8935 WHERE IT IS USED
Detecting light sources

PROBLEM(S) IT OVERCOMES

difficulty experienced by blind persons when monitoring their environments

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Applied Rehabilitation Systems Inc. 3902 Idlewild Austin, TX 78731

\$69.50 plus tax

HOW IT WORKS

Developed as a spinoff from NASA Aerospace Research and Development, the Audible Light Meter is a portable light detection system which can let the blind person know when electric lights are on or off, when indicator lights on automatic appliances are on, when stock supplies are not on display correctly, when commercial coffee pots need to be refilled, when it is daylight or dark outside, and when colors of items are different. It can assist with mobility. Doorways, room parameters, halls, and windows can be detected from a distance. The small, hand-held device activates an accoustical signal of varying frequencies when pointing toward a source emitting or reflecting light. The tones vary with the amount of light reflected (as in colors of clothing) or emitted on the light detection system.

(Information based on company literature.)

MOWAT SENSOR



Photograph courtesy of Sensory Aids Corporation

Wormald International Sensory Aids, Ltd. Christchurch, New Zealand and Sensory Aids Corporation Bensenville, IL 60106

CONTACT PERSON

B. Blasch Sensory Aids Corporation 205 W. Grand Bensenville, IL 60106 (312) 766-3935

WHERE IT IS USED

Travel

PROBLEM(S) IT OVERCOMES

visual impairment; hearing impairment

FIELD TESTED

yes

U.S.A., Australia, New Zealand, England

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Wormald International Sensory Aids P.O. Box 10014 Christchurch, New Zealand \$435.00

See appendix for availability in Australia and Europe, all other countries use above address.

HOW IT WORKS

This is a hand-held unit which uses high frequency sound to detect objects within a narrow area. When an object is detected, the entire unit vibrates. It is used in conjunction with a long cane or guide dog.

The user can set the sensor to respond to objects less than one meter away or up to four meters away. The range settings are controlled by a sliding thumb switch on top of the case. To determine direction of an object, the user scans the area as a sighted person scans with a flashlight.

The unit, measuring 150mm x 50mm x 25 mm, operates on a rechargeable battery.

(Information based on Wormald International Sensory Aids, Ltd. brochure.)

SONICGUIDE





Photographs courtesy of Sensory Aids Corporation

Wormald International Sensory Aids, Ltd. Christchurch, New Zealand and Sensory Aids Corporation Bensenville, IL 60106

CONTACT PERSON

B. Blasch Sensory Aids Corporation 205 W. Grand Suite 110 Bensenville, IL 60106 (312) 766-3935 WHERE IT IS USED

Travel

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

U.S.A., Australia, New Zealand, England

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

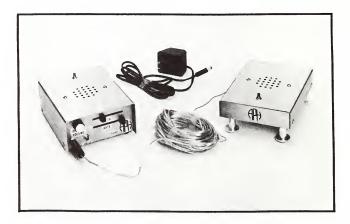
Sensory Aids Corporation 205 W. Grand Suite 110 Bensenville, IL 60106 \$2195.00

See appendix for availability outside U.S.A. and Canada.

HOW IT WORKS

Users can judge direction, distance and surface qualities of objects in their travel path. Sensors are built into a spectacle frame so that the user develops similar head movements and posture to a sighted person. In the center of the spectacle frame is a transmitter which radiates ultrasound in front of the user. The ultrasound hits an obstruction, is reflected to the aid, converted into electrical signals by the receiving microphones and then into audible sounds by the earphones in the temples of the frame. Small tubes direct the sound to the ear. Sounds will be louder in the ear nearest the object. The pitch will vary with the distance of the object. A small control box which can be carried in a pocket, at the belt or on a shoulder strap, contains the aid's electronics.

(Information based on Wormald International Sensory Aids, Ltd. brochure.)



Photograph courtesy of American Printing House for the Blind

Manufactured by: American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206

CONTACT PERSON

Ralph E. McCracken American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206 (502) 895-2405

WHERE IT IS USED

Assembly
Improve mobility and
independence

PROBLEM(S) IT OVERCOMES

visual impairment; multiple handicaps

FIELD TESTED

information not available

REGULATORY APPROVAL

U.S. Department of Health, Education and Welfare

WARRANTY PROVIDED

ves

FOR SALE

American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206 \$142.50

HOW IT WORKS

This device consists of a master unit containing all the electronics, speaker and power, and the remote unit containing only a speaker and the cord. On/off volume control knob plus frequency and pulse-rate controls are located on the master unit. Each unit bears a "response switch" which makes the Soniquide different from other sound devices. Emphasis can be placed on tracking, localizind and responding to sound, balance and posture, arm positioning for independent travel, or cane travel. Because of this "response switch", repetition in learning experiences needed by the multi-handicapped is built into the whole system. Thus it could be helpful in repetitious assembly-line tasks where constant verbal prompts are not possible.

(Information based on American Printing House for the Blind literature.)

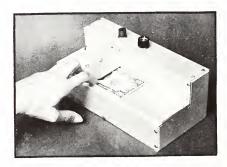
MONEY EXCHANGE

raper	· money	Identifier	•	•	•	•	•	•	•	•	•	•	50
WWRC.	Vacuum	Wand											504

PAPER MONEY IDENTIFIER







Photographs courtesy of Applied Rehabilitation Systems Inc.

Marchak Engineering & Manufacturing Co. 6609 North Lamar Austin, TX 78752

CONTACT PERSON

Applied Rehabilitation Systems Inc. 3902 Idlewild Austin, TX 78731 (512) 459-8935

WHERE IT IS USED

Business Marketing Office Sales

PROBLEM(S) IT OVERCOMES

inability of a blind person to easily
distinguish denominations of paper money

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Applied Rehabilitation Systems Inc. 3902 Idlewild Austin, TX 78731 \$189.50 plus tax

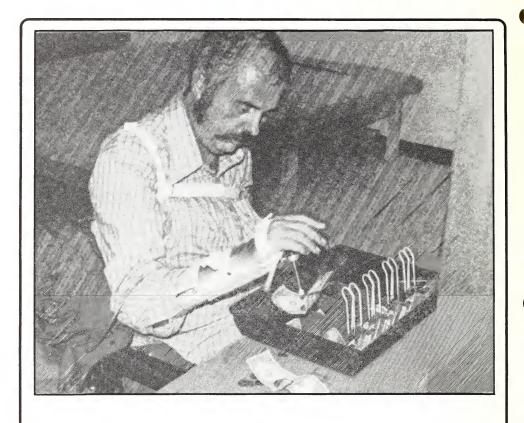
HOW IT WORKS

Developed as a spinoff from NASA's Aerospace Research and development efforts, the Paper Money Identifier (PMI) is an instrument for distinguishing the various denominations of paper money from each other. The back side of each bill has a characteristic sound pattern corresponding to the shades of color on the bill. Lighter colors emit a distinguishing higher pitched sound than do darker colors.

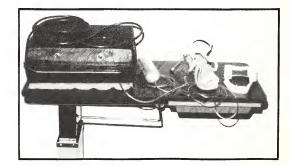
The instrument incorporates a light that shines on a photoelectric cell. When the bill is passed under this beam, various amounts of light are reflected onto the photocell. These amounts correspond to the configurations printed on the bill. The light variations change the voltage which causes changes on the sounds emitted as the bill is moved through the PMI.

(Information based on company literature)

WWRC VACUUM WAND



Photographs courtesy of David F. Law, Jr,



Woodrow Wilson Rehab. Ctr. Rehabilitation Engin. Dept. Fishersville, VA 22939 (703) 885-9724

CONTACT PERSON

David F. Law, Jr. Woodrow Wilson Rehab. Ctr. Rehabilitation Engin. Dept. Fishersville, VA 22939 (703) 885-9724

WHERE IT IS USED

Clerical Sales Service

PROBLEM(S) IT OVERCOMES

inability to handle individual pieces of paper money

FIELD TESTED

yes

Woodrow Wilson Rehabilitation Center

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

FOR SALE

no

HOW IT WORKS

A compact unit supplies vacuum to a small suction cup on a cock-up splint. This provides relatively strong prehensile force, and can be used easily by a quadriplegic person to manipulate currency. The vacuum is controlled either by sip and puff or by a compression bulb under the arm pit. By using a pneumatic control, no electrical components ever contact the individual.

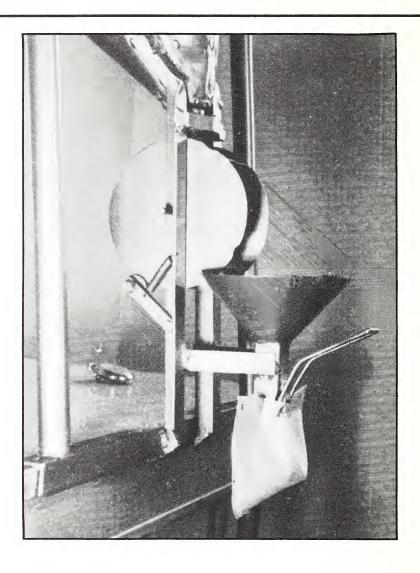
(Information provided by David F. Law, Jr.)



PACKAGING

Accurate Packaging of Dry Bulk			
Material	•	•	508
Applying Labels to Bottles	•	•	510
Carrousel Type Packaging Conveyor			512
Coiling Flexible Plastic Tubing .	•	•	514
Coiling Hose for Blister Packaging			516
"Counting Aids"	•	•	518
Fixture to Package Small Items .	•	•	520
The Modification of a Handheld			
Heat Sealer	•	•	522
Multiple Parts Packaging Station			524
Net Weight Packaging of Small			
Items	•	•	526
Packaging for Uniform Appearance			528
Packaging Small Quantities of			
Metal Parts	•	•	530
Shaker Table for Bulk Product			
Packaging	•	•	532
Shutter Packager			534

ACCURATE PACKAGING OF DRY BULK MATERIAL



Photograph courtesy of California Department of Rehabilitation

Charles Eckles Independent Contract Consultant (213) 360-4180

CONTACT PERSON

California Department of Rehabilitation 830 "K" Street Mall Sacramento, CA 95814 (916) 322-8500 WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

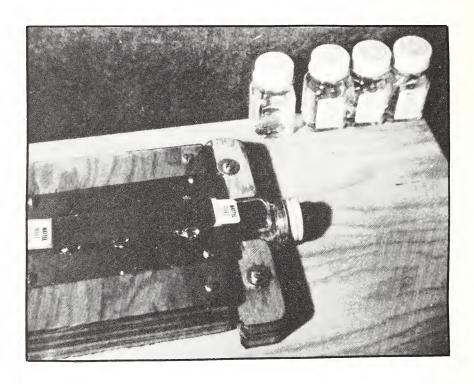
May be made at a minimal cost.

HOW IT WORKS

This piece of equipment is designed to measure out and bag a fixed volume of sand. The sand pours from a hopper into a wheel with four sections, each section holding a fixed volume of sand. When one section is filled, the hopper stops pouring. The wheel is then rotated by hand into the funnel, from which the sand is poured into a bag placed below the funnel. As the wheel rotates, sand flows into the next section and the process repeats itself. A wire extension from the bag is an expander to keep the bag open to reduce the possibility of spill.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

APPLYING LABELS TO BOTTLES



Photograph courtesy of California Department of Rehabilitation

APPLYING LABELS TO BOTTLES

DEVELOPER

Charles Eckles Independent Contract Consultant (213) 360-4180

CONTACT PERSON

California Department of Rehabilitation 830 "K" Street Mall Sacramento, CA 95814 (916) 322-8500 WHERE IT IS USED
Applying labels

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

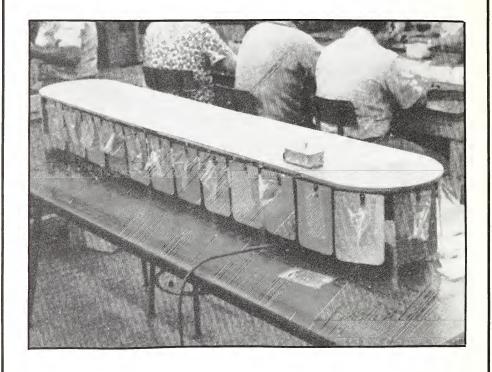
May be made at a minimal cost.

HOW IT WORKS

This simple positioning jig aids in applying labels exactly where they belong on small bottles. The roll of lables is held in position directly in line with a slot that holds the bottle. The labels are threaded through the slot and come out in exactly the right place for application to the bottle. Improved quality and a highly increased rate of production results from use of this jig.

(Information based on <u>A Handbook of</u> Workshop Production Aids, California Department of Rehabilitation.)

CARROUSEL TYPE PACKAGING CONVEYOR



Photograph courtesy of California Department of Rehabilitation

Charles Eckles Independent Contract Consultant (213) 360-4180

CONTACT PERSON

California Department of Rehabilitation 830 "K" Street Mall Sacramento, CA 95814 (916) 322-8500

WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

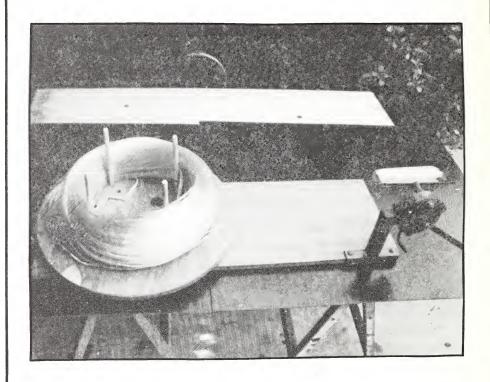
May be made at a minimal cost.

HOW IT WORKS

This is a unique type of packaging conveyor suitable for gathering small light weight parts. Suspended clipboards hang from a motor driven belt and rotate around the work table. At the first work station, plastic bags are clipped to the board. Each successive worker then adds his or her particular item to the bag and the last worker removes the bag and seals it. One advantage to this carrousel type conveyor is that the motor speed (RPM) is controllable by regulating the voltage and therefore adaptable to the work pace of those using it. One person may be able to place only one item in the bag, while another might be able to handle three or four.

(Information based on <u>A Handbook of Workshop Production Aids</u>, California Department of Rehabilitation.)

COILING FLEXIBLE PLASTIC TUBING



Photograph courtesy of Califormia Department of Rehabilitation

Charles Eckles Independent Contract Consultant (213) 360-4180

CONTACT PERSON

California Department of Rehabilitation 830 "K" Street Mall Sacramento, CA 95814 (916) 322-8500 WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

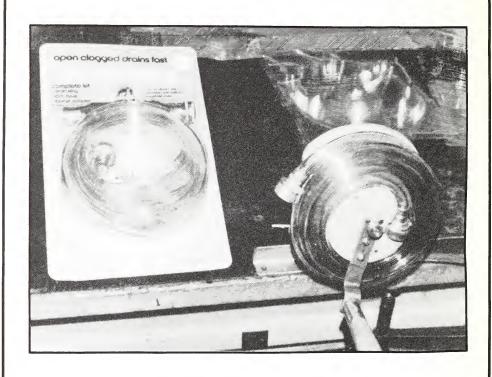
May be made at a minimal cost.

HOW IT WORKS

This device simplifies the job of wrapping small diameter plastic tubing onto a form for packaging. A hand-cranked grinder is converted into a winding machine by removing the grinding wheel and adapting the shaft to hold a six-inch winding hank. The grinder is geared so that one and one-half turns of the handle winds an 18-foot length of tubing onto the hank form which can then be slid off of its holder pegs ready for packaging.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

COILING HOSE FOR BLISTER PACKAGING



Photograph courtesy of California Department of Rehabilitation

Charles Eckles Independent Contract Consultant (213) 360-4180

CONTACT PERSON

California Department of Rēhabilitation 830 "K" Street Mall Sacramento, CA 95814 (916) 322-8500 WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

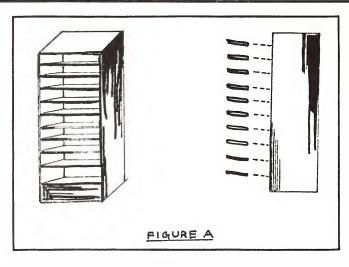
May be made at a minimal cost.

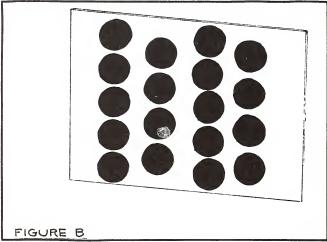
HOW IT WORKS

This device simplifies the coiling of plastic hose to a required size to fit a blister pack. A winding reel, that is cranked by hand, is used: one flange of the wheel contains a notch to hold the end of the hose in position while coiling the strand around the core. With the uniform coils of hose, blister packaging becomes a simple process.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

"COUNTING AIDS"





Diagrams courtesy of Susanne Wynkoop

Dieter A. Papke 555 Fern Street Westwood, NJ 07675 (201) 664-3173

CONTACT PERSON

Susanne Wynkoop Associated Craftsmen/ Easter Seals 15 Emerald Street Mackensack, NJ 07601 (201) 342-5739

WHERE IT IS USED

Benchwork Packaging

PROBLEM(S) IT OVERCOMES

difficulty in packaging materials correctly when the packager has difficulty counting accurately

FIELD TESTED

yes

Associated Craftsmen/Easter Seals

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

FOR SALE

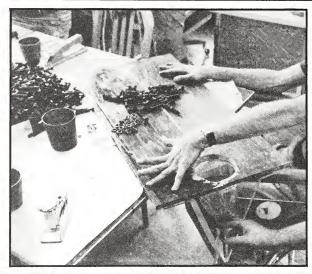
May be made at a minimal cost.

HOW IT WORKS

Since 15 to 20% of our workshop population cannot count, we developed a nonnumerical system. Cartons arrived at our plant in cases of 200 units. We were to unpack the cartons, bundle them into sets of 10 units, and repack them. In order for "non-counting" workers to complete this task I constructed cardboard racks of ten shelves. They were instructed to place one carton on each shelf and when the rack was full to remove the cartons and bundle them with a rubber band. A rack can be constructed in about 15 minutes. Cardboard boxes make excellent frames. You tape, staple, or glue flat cardboard sheets into the frame to create the number of shelves you desire (see Fig. "A"). Figure "B" illustrates the type of jig we used for dividing cases of jar caps into sets of eighteen units. Here, using a stencil with spray paint, I painted 18 circles (with circumference equal to that of caps) onto a piece of white cardboard. The disabled worker was instructed to place one cap on each circle of the board. When all the circles were covered they placed the 18 caps into a plastic bag which was then sealed. Even our numerically able workers used this counting jig because it allowed them to converse while performing a task which would ordinarily require silent counting. This in turn lowered our error rate and the amount of downtime due to worker socialization. Individual work speed and quality improved with the incorporation of this jiq.

(Information provided by Susanne Wynkoop.)

FIXTURE TO PACKAGE SMALL ITEMS





Photographs courtesy of Mark Stephenson

FIXTURE TO PACKAGE SMALL ITEMS

DEVELOPER

Mark Stephenson Occupational Services, Inc. 17 Redwood St. Chambersburg, PA 17201

CONTACT PERSON

WHERE IT IS USED Packaging

PROBLEM(S) IT OVERCOMES

difficulty experienced by some persons with cerebral palsy in reading, grasping, placing, or holding items

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

no

HOW IT WORKS

One person usually performs this job. In this case the job was divided. The board was designed to reduce the movements of reaching, grasping, placing and holding to reaching and pushing item into funnel. The person at the other end of the operations inserts instruction sheet into the poly bag, places poly bag on funnel, retrieves it and staples it shut.

Materials: 4" X 18" X 1/4" Plexiglas, 18" X 36" X 1/4" AC grade plywood, funnel from 2 litre Pepsi bottle, acrylic latex caulk, paneling nails 18-1/2" woodscrews 18-washers, polyurethane varnish.

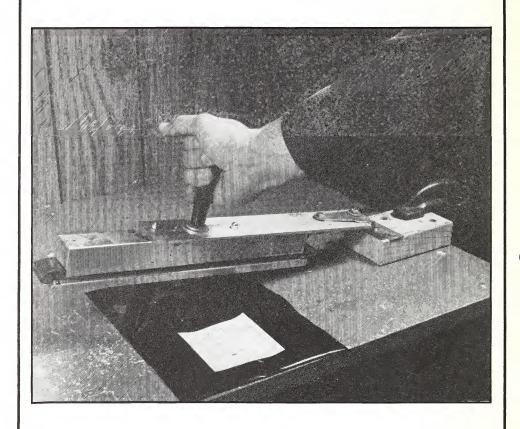
Equipment: Heat strip for bending plastic (acquired from Plastic Distributor/Manu-facturer in area \$9.00), hand drill, sabre saw.

Instructions: Cut hole in plywood according to size of funnel. Nail funnel to board, line union with acrylic latex caulk. Varnish when caulk is dry.

Length of Plexiglas depends upon: length of the funnel and length of poly bag. Overall length of Plexiglas should include distance from fastening to board, and distance from V in Plexiglas to end of funnel to allow for the materials to leave the funnel completely and the poly bag to remain on the funnel with packaged items.

(Information provided by Mark Stephenson,

THE MODIFICATION OF A HANDHELD HEAT SEALER



Photograph courtesy of Albert E. Swarts, P.E.

THE MODIFICATION OF A HANDHELD HEAT SEALER

DEVELOPER

Albert E. Swarts, P.E. Richard L. Biddy, Dir. Vocational Industrial Center - (Houston) Donald R. Smith, PH.D. Texas A & M University -(College Station)

CONTACT PERSON

Albert E. Swarts, P.E. Vocational Industrial Ctr. Institute for Rehabilitation and Research 2809 Main Street Houston, TX 77002 (713) 797-1440

WHERE IT IS USED

Assembly Benchwork

PROBLEM(S) IT OVERCOMES

use of only one hand; lower extremity weakness

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

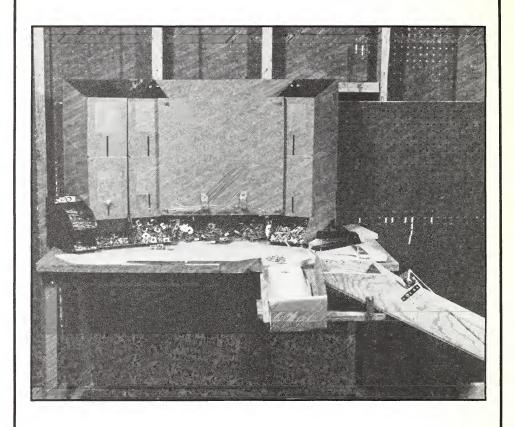
May be made at a minimal cost.

HOW IT WORKS

A hinge is attached to a hand heat sealer so that it can be swung down on a definite line when clamped to a table top. This is accomplished by mounting an extra plate to the back of the sealer to provide the extension needed to mount the hinge.

(Information based on Examples of Jig and Fixture Design as Applied to the Severely Disabled Functioning in a Sheltered Workshop, Biddy, Smith and Swarts,)

MULTIPLE PARTS PACKAGING STATION



Photograph courtesy of Albert E. Swarts, P.E.

Albert E. Swarts, P.E. Richard L. Biddy, Dir. Vocational Industrial Center - (Houston) Donald R. Smith, Ph.D. Texas A & M University -(College Station)

CONTACT PERSON

Albert E. Swarts, P.E. Vocational Industrial Ctr. Institute for Rehabilitation and Research 2809 Main Street Houston, TX 77002 (713) 797-1440

WHERE IT IS USED

Assembly Benchwork

PROBLEM(S) IT OVERCOMES

use of only one hand; lower extremity weakness; reach limitations

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

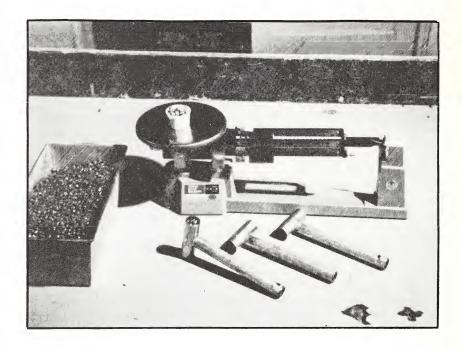
May be made at a minimal cost.

HOW IT WORKS

A system of gravity feed bins was designed to store a considerable volume of parts while being constantly within reach of the worker. The smooth area in front of the user permits easy counting of the parts. The packages for the parts are held in a bind under the chute used for loading them. The chute holds the package open while it is being loaded. After the package is loaded and stapled closed, it is dropped into a delivery chute which carries it to the shipping container. A grate on the chute is equipped with a counter to record the number for a constant quantity in each container. This simplifies customer billing and piece rate payment.

(Information based on Examples of Jig and Fixture Design as Applied to the Severely Disabled Functioning in a Sheltered Workshop, Biddy, Smith and Swarts.)

NET WEIGHT PACKAGING OF SMALL ITEMS



Photograph courtesy of California Department of Rahabilitation

Charles Eckles Independent Contract Consultant (213) 360-4180

CONTACT PERSON

California Department of Rehabilitation 830 "K" Street Mall Sacramento, CA 95814 (916) 322-8500

WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

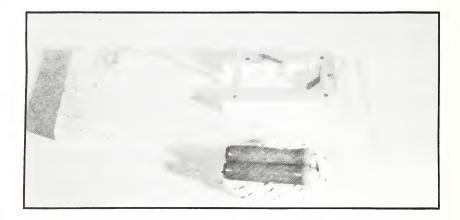
May be made at a minimal cost.

HOW IT WORKS

This jig simplifies the job of packaging small pellets in individual envelopes. Using a bulk measuring scoop to pre-establish approximate net weights is a great time saver in the packaging of small items. The pellets are scooped up by the dipper and emptied into a paper cup placed on a balance-type scale. The exact net weight can then be adjusted by adding or removing the necessary amount of material from the cup.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

PACKAGING FOR UNIFORM APPEARANCE



Photograph courtesy of California Department of Rehabilitation

Charles Eckles Independent Contract Consultant (213) 360-4180

CONTACT PERSON

California Department of Rehabilitation 830 "K" Street Mall Sacramento, CA 95814 (916) 322-8500

WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

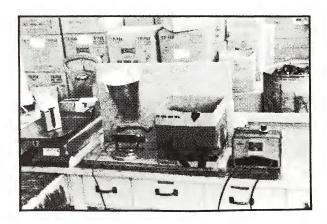
FOR SALE

May be made at a minimal cost.

HOW IT WORKS

This jig simplifies the difficult task of preparing a jump rope for packaging. A simple wooden jig and a frame with 2 dowels is all that is needed to hold the rope in position. The jump rope handles are placed on either side of the dowels and the rope is wrapped around them. The coiled rope can be lifted out exactly as required to fit into a packaging wrapper.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)



Photograph courtesy of California Department of Rehabilitation

PACKAGING SMALL QUANTITIES OF METAL PARTS

DEVELOPER

Charles Eckles Independent Contract Consultant (213) 360-4180

CONTACT PERSON

California Department of Rehabilitation 830 "K" Street Mall Sacramento, CA 95814 (916) 322-8500

WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

difficulty picking up nails by hand from a bulk container

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

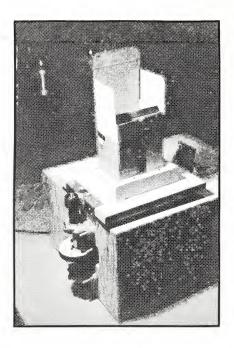
May be made at a minimal cost.

HOW IT WORKS

This device simplifies the job of picking up nails by hand from a bulk continer and repackaging them into smaller boxes. An electro-magnet, which can be obtained from an automobile air conditioner clutch, is fitted with a handle and powered by an inexpensive battery charger. With the power on, the magnet lifts a fixed quantity of nails from the bulk supply. The lifting power of the magnet can be adjusted to pick up the desired quantity of nails by weight through varying the charger's output voltage. The lifting unit is then positioned over a funnel, the power interrupted and the nails drop through into the package. The exact weight of this package is adjusted by adding to or removing nails by hand.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.

SHAKER TABLE FOR BULK PRODUCT PACKAGING



Photograph courtesy of California Department of Rehabilitation

Charles Eckles Independent Contract Consultant (213) 360-4180

CONTACT PERSON

California Department of Rehabilitation 830 "K" Street Mall Sacramento, CA 95814 (916) 322-8500

WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

difficulty in packaging the proper amount of bulk material into a snug container

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

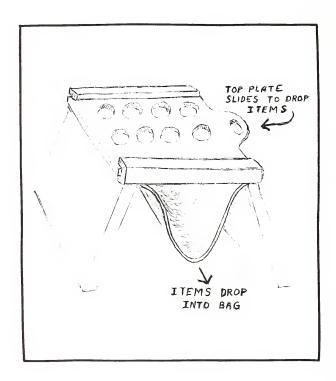
May be made at a minimal cost.

HOW IT WORKS

This jig simplifies difficult packaging jobs where the space provided does not seem large enough to hold the product. In these cases, the volume can often be reduced by vibrating the product to compact it in its container. For this kind of packaging job, the shaker table was developed. It is a plywood table supported on a rubber cushion over a box. A 1/5 h.p. motor is mounted inside the box, with a belt drive to a vertical shaft outside which has an off-center eccentric bearing on top. As the drive shaft rotates, the package is jiggled back and forth shaking its contents deeper into its interior.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

SHUTTER PACKAGER



Sketch provided by Steve Spudich

SHUTTER PACKAGER

DEVELOPER

Malcolm Eaton

CONTACT PERSON

Steve Spudich Association for the Handicapped 219 E. Spring Street Freeport, IL 61032 (815) 235-7181

WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

inability to count; use of only one hand

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Association for the Handicapped 219 E. Spring Street Freeport, IL 61032

May be made at a minimal cost.

HOW IT WORKS

Openings are cut in a plate to conform to the size of the items to be packaged. The number of openings depends on the number of items to be bagged or boxed. After all openings are filled, the top plate is slid to allow the items to fall through the opening in the bottom plate and drop into a bag or box attached to the spout.

(Information provided by Steve Spudich, Association for the Handicapped.)



REACHING

Gustavsberg Extended	Arm .	•	•	•	•	•	538
Multipurpose Utility	Stick			•	•	•	540
Reaching Aids							542



Photograph courtesy of AB Gustavsberg

AB Gustavsberg S-134 00 Gustavsberg Sweden 0766-391 00

CONTACT PERSON

Mr. Agu Kriisa S-134 00 Gustavsberg Sweden 0766-391 00

WHERE IT IS USED

Reaching

PROBLEM(S) IT OVERCOMES

limited reach range

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

AB Gustavsberg S-134 00 Gustavsberg Sweden

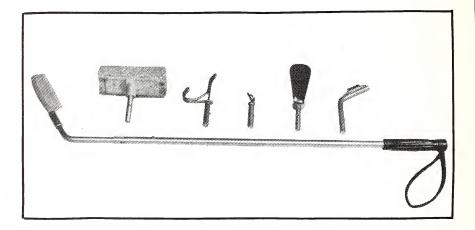
Maddak, Inc. Pequannock, NJ 07440 (product listed as Universal Reacher)

HOW IT WORKS

These tongs are fitted with a pistol-type grip which can be operated with a straight wrist. It has a support arm allowing the arm to rest and taking the weight off the wrist. A loop and wrist link is available in place of the support arm for people with strong wrists. Three fingers using low pressure can operate the pressure key. The grab claw can be turned 360° locking automatically at the desired angle when the pressure key is depressed. On one leg of the claw is a magnet for picking up small metal objects. The gripping device can grasp flat and round objects and is fitted with a hook that makes lifting heavy objects easier. The gripping device is lightweight and lined with patterned rubber,

(Information based on Gustavsberg brochure.)

MULTIPURPOSE UTILITY STICK



Photograph courtesy of Hausmann Industries

Hausmann Industries 130 Union Street Northvale, NJ 07647 (201) 767-0255

CONTACT PERSON

Rose Rowan Advertising Manager Hausmann Industries 130 Union Street Northvale, NJ 07647 (201) 767-0255

WHERE IT IS USED

Reaching

PROBLEM(S) IT OVERCOMES

restricted motion of upper extremities; joint damage

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

ves

FOR SALE

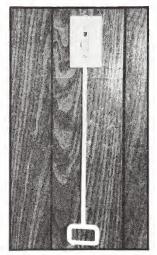
Hausmann Industries 130 Union Street Northvale, NJ 07647

HOW IT WORKS

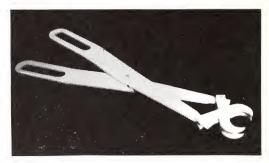
The following items can be attached to an anodized aluminum master shaft 24" long with a wrist strap at the end: shoe horn, comb, magnet, reaching hook, mop sponge and grasping clip.

(Information based on Hausmann catalog.)

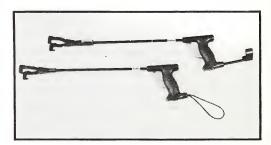
REACHING AIDS



Light Switch Extension Handle



Power Grip Tongs



Maddak Universal Reacher

Photographs courtesy of Maddak, Inc.

Manufactured by: Maddak, Inc. Pequannock, NJ 07440 (201) 694-0500

CONTACT PERSON

Fred M. Joslyn Maddak, Inc. Pequannock, NJ 07440 (201) 694-0500 WHERE IT IS USED

PROBLEM(S) IT OVERCOMES

limited arm movement; confinement to a wheelchair

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

information not available

FOR SALE

Maddak, Inc.
Pequannock, NJ 07440

Power Grip Tongs (21" long) \$39.00 Power Grip Tongs (36" long) \$49.50 Light Switch Extension Handle \$3.75 Maddak Universal Reacher \$43.50

HOW IT WORKS

The Power Grip Tongs are a heavy duty all plastic tool for increasing the arms' reach and providing great mechanical advantage in the gripping claw. Maximum opening of claw is 25". The Light Switch Extension Handle is a molded plastic adapter which fits all standard toggle type wall electric switches. It is easily installed by removing the existing switch plate, and using the same screws, mounting the extension handle. The operating handle extends 17" below the switch. The Maddak Universal Reacher is a functionally designed "extended arm", light and well balanced. The full hand trigger creates a quick and positive grip with a straight wrist position. The support arm contacts the user's forearm, relieving the wrist of stress. The grab claw can be rotated a full 360°, but locks into position when the trigger is pressed. It is suitable for flat or round objects and has hooked ends for heavier loads.

(Information based on Maddak Catalog No. 479, 1979,)

READING

A7 Speech Controller	546
APH Variable Speech Control TM Module	548
Oottran - Braille Translation Program	550
Oual Image System	552
Fishburne Alphabet for the Blind	554
Illuminated Magnifier	556
Kurzweil Data Entry Machine	55 8
Kurzweil Reading Machine	560
Magazine and Bookholders	562
Model 2C Electronic Visual Aids	564
Optacon Print Reading System	566
Page Turner	568
Page Turner	570
Page Turners	572
Portareader Electronic Visual Aid .	574
/ariable Speed Control [™] Listening Adapter	576
Varispeech II Recorder	578
VersaBraille System	580
/ideo Visual Read/Write System	582
Voyager	584
/Si Masterlens Systems	586



Photograph courtesy of Variable Speed Control Corporation

Variable Speed Control Corporation 185 Berry Street San Francisco, CA 94107 (415) 495-6100

CONTACT PERSON

Grady Hesters Variable Speed Control Corporation 185 Berry Street San Francisco, CA 94107 (415) 495-6100

WHERE IT IS USED

Listening Reading

PROBLEM(S) IT OVERCOMES

learning problems of the visually handicapped; improves clarity of slowed speech; used to give audio instructions at a pace which matches the skill of the worker

FIELD TESTED

yes

VA. universities

REGULATORY APPROVAL

UL for Model A7q

WARRANTY PROVIDED

ves

FOR SALE

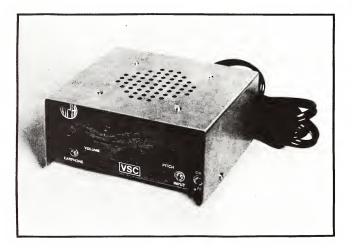
Variable Speech Control 185 Berry Street San Francisco, CA 94107 Also see dealer list in appendix. \$295.00

HOW IT WORKS

The A7 Speech Controller has all the features of an ordinary cassette tape_recorder plus Variable Speech Control M. This patented technology pitch corrects recorded speech from 60% to 250% of original recorded speed. A simple movement of the VSC rate-control lever adjusts speed of playback and simultaneously corrects pitch so that high-speed "chipmunk" and low-speed "grumble" effects are eliminated. The result is that a listener can audit a one-hour spoken word cassette in 30 minutes or less and understand every word, a person can listen at up to 400 words per minute.

(Information provided by Irene Gilbert Mattei, VSC.)

APH VARIABLE SPEECH CONTROL TM MODULE



Photograph courtesy of American Printing House for the Blind

APH VARIABLE SPEECH CONTROLTM MODULE

DEVELOPER

American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206

CONTACT PERSON

Ralph E. McCracken American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206 (502) 895-2405

WHERE IT IS USED

Listening Reading

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

U.S. Department of Health, Education and Welfare

WARRANTY PROVIDED

yes

FOR SALE

American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206 \$97.50

HOW IT WORKS

The APH Variable Speech Control Module allows recorded speech to be increased or decreased without pitch distortion. It operates on 120 volts AC and has a power amplifier and speaker. Other features are a rate control, volume control, earphone jacks and off/on switch. It was designed to work with GE Cassette Recorder and the APH Talking Book Reproducer, but may also be used with any machine with a variable speed capacity.

(Information based on American Printing House for the Blind literature.)

DOTTRAN - BRAILLE TRANSLATION PROGRAM



ARTS Computer Products 80 Boylston Street Suite 1260 Boston, MA 02116 (617) 482-8248

CONTACT PERSON

Peter Duran ARTS Computer Products 80 Boylston Street Suite 1260 Boston, MA 02116 (617) 482-8248

WHERE IT IS USED

Education
Information Retrieval
Reading

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

no

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

ARTS Computer Products 80 Boylston Street Suite 1260 Boston, MA 02116 \$6,000 for complete unit

HOW IT WORKS

Dottran is a computer program consisting of a set of algorithms that translates text into Grade II Braille. It has an unlimited vocabulary therefore the translation is based on the rules of the algorithms rather than a print character to dot pattern direct correlation. What users purchase will depend on what they have already. The Dottran Unit consists of the Dottran software stored in PROMs on an 8080 microprocessor. It is possible to purchase a binary tape of the software separately.

(Information based on ARTS literature.)

DUAL IMAGE SYSTEM

Photograph not available

Apollo Electronic Visual Aids 6357 Arizona Circle Los Angeles, CA 90045 (213) 776-3343

CONTACT PERSON

Dennis Allen Apollo Electronic Visual Aids 6357 Arizona Circle Los Angeles, CA 90045 (213) 776-3343 WHERE IT IS USED

Magnification

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

UL, OSHA

WARRANTY PROVIDED

yes

FOR SALE

Apollo Electronic Visual Aids 6357 Arizona Circle Los Angeles, CA 90045 As of 1/1/80

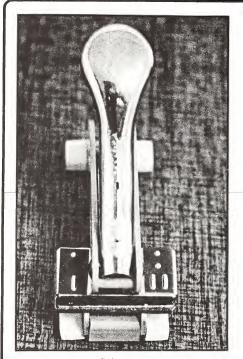
AS OF 1/1/80 \$3,850.00

HOW IT WORKS

The Dual Image is a two camera, one monitor integrated system. The 17" monitor features a built-in split screen generator that permits the scenes from both cameras to appear on the monitor at the same time. The magnification of two pieces of work make it possible for the user to reference and transcribe information at the same time. It has been used in conjunction with a typewriter, a calculator and assembly materials. The size of the equipment makes it possible to use in the home or the office.

(Information based on Apollo Electronic Visual Aids product literature.)

FISHBURNE ALPHABET FOR THE BLIND

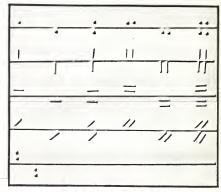


Embosser



Telephone Number File Cards

Photographs courtesy of S.B. Fishburne



Thermoform Master



Labeling Canned Goods

S.B. Fishburne 4243 Warren Avenue Sacramento, CA 95822 (916) 442-3368

CONTACT PERSON

C.C. Fishburne
Fishburne Engineering
221 N. Gordon Drive
Winston-Salem, NC 27104
(919) 765-2928

WHERE IT IS USED

Communication Labeling Reading Recording Information

PROBLEM(S) IT OVERCOMES

visual impairment and inability to use Braille

FIELD TESTED

Sacramento Society for the Blind -Sacramento, CA

REGULATORY APPROVAL

no

WARRANTY PROVIDED

information not available

FOR SALE

Fishburne Engineering 221 N. Gordon Drive Winston-Salem, NC 27104

Magnetic Training Alphabet \$4.60 Embosser \$21.00 Audio Cassettes #1, 2, 3 \$3.50 each

HOW IT WORKS

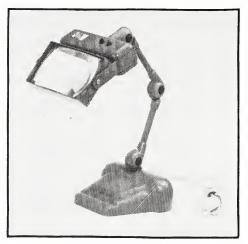
This alphabet system of dots, dashes and slashes can be used by those who do not read Braille. Although its uses are limited, it gives the person a way to record such things as addresses, telephone numbers, labels, cassettes, etc. The system uses embossed characters which are very easy to feel and learn. Cassette tapes are available for self instruction.

A thermoform master of the embossed alphabet characters is used as a training aid. The horizontal lines are called "Guide Lines." Each line is named for the first letter of the line there is an "A" line, a "G" line, an "M" line, etc.

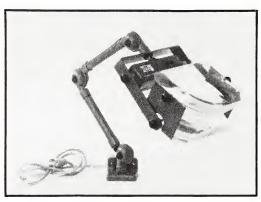
Letters are also used as numbers. Embossed single letters, mounted on magnets are used for spelling and writing words. A lightweight metal slate serves as a surface for the letters. An embosser has been engineered by Mr. Henry Sleeper of Sacramento, for Fishburne. Letters are embossed on ½" wide Dymo tape, which is cut into 1" long strips, prior to embossing. Inch long strips already cut with a tab for easy removal of adhesive cover, are available. Also available is a cutter that holds a 12' roll, and uses a trigger to cut and score 1" strips.

(Information based on Fishburne literature.)

ILLUMINATED MAGNIFIER



2x magnification



4x magnification

Photographs courtesy of Stecker & Yale, Inc.

Manufactured by: Stocker & Yale, Inc. 133 Brimbal Avenue Beverly, MA 01915 (617) 927-3940

CONTACT PERSON

Michael A. Lavey Stocker & Yale, Inc. 133 Brimbal Avenue Beverly, MA 01915 (617) 927-3940

WHERE IT IS USED

Magnification

PROBLEM(S) IT OVERCOMES

visual impairment; rectangular lens easy on eyes, prevents fatigue and nausea

FIELD TESTED

yes

standard industrial product

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Stocker & Yale, Inc. 133 Brimbal Avenue Beverly, MA 01915

HOW IT WORKS

A 6"x8" ground lens providing 2x or 4x magnification is coupled with a 4 watt fluorescent light. Adjustable 9"x9" arms with friction swivels and clamp or screwbase allows a 7" working distance. Operates on 115v. 60 cycle AC.

(Information based on Stocker & Yale, Inc. literature.)

KURZWEIL DATA ENTRY MACHINE





Photographs courtesy of Kurzweil Computer Products, Inc.

KURZWEIL DATA ENTRY MACHINE

DEVELOPER

Kurzweil Computer Products, Inc. 33 Cambridge Parkway Cambridge, MA 02142 (617) 864-4700

CONTACT PERSON

Michael Hingson Kurzweil Computer Products, Inc. Print to Braille Dept. 33 Cambridge Parkway Cambridge, MA 02142 (617) 864-4700

WHERE IT IS USED

Reading Transcribing Braille

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

no

WARRANTY PROVIDED

yes

FOR SALE

Kurzweil Computer Products, Inc. 33 Cambridge Parkway Cambridge, MA 02142

HOW IT WORKS

Printed material is converted into Grade II Braille by this system which incorporates the Kurzweil Data Entry Machine, a computer based Braille translator and a Braille embosser. The printed text is read by the Data Entry Machine and converted into standard computer code. It is then converted from computer code into Braille code by the Braille translator and then interfaces with an embosser to produce a Braille printout.

(Information based on Kurzweil Computer Products, Inc. literature; verbal explanation provided by Ron Myren, Wisconsin Vocational Studies Center.)

KURZWEIL READING MACHINE





Photographs courtesy of Kurzweil Computer Products, Inc.

Kurzweil Computer Products, Inc. 33 Cambridge Parkway Cambridge, MA 02142 (617) 864-4700

CONTACT PERSON

JoAnn Giudicessi Reading Machine Dept. Kurzweil Computer Products, Inc. 33 Cambridge Parkway Cambridge, MA 02142 (617) 864-4700

WHERE IT IS USED

Reading

PROBLEM(S) IT OVERCOMES

Visual impairment

FIELD TESTED

yes

National Federation of the Blind; Bureau of Ed. for the Handicapped; Rehabilitation Services Administration; VA

REGULATORY APPROVAL

no

WARRANTY PROVIDED

ves

FOR SALE

Kurzweil Computer Products, Inc. 33 Cambridge Parkway Cambridge, MA 02142 \$29,800

HOW IT WORKS

KRM consists of a desk top reading unit with scanner, an electric control unit connected to the scanner by a flexible cable, and a speaker. Material to be read is placed face down on the glass surface of the desk top reading unit. The control unit is activated by the user commanding the machine to perform various functions. The first line of the text is automatically located by the scanning mechanism and an electronic voice reads the material. With the control unit the user can adjust the reading rate and voice tone, have lines repeated, have words spelled out and have words or phrases marked for later reference (analogous to underlining). A hand tracking option allows the user to manually scan a page and determine the location of columns of type, pictures and diagrams. Users can quickly switch back and forth between automatic and manual tracking. The keyboard of the reading machine can be converted into a talking calculator performing the standard functions and all scientific functions. The KRM can also be used to convert English text from a computer or CRT terminal into speech.

(Information based on Kurzweil Computer Products, Inc. brochure.)

MAGAZINE AND BOOKHOLDERS

Photograph not available

MAGAZINE AND BOOKHOLDERS

DEVELOPER

Carl H. Beil 5435 N. Artesian Avenue Chicago, IL 60625

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Reading

PROBLEM(S) IT OVERCOMES

limited hand or arm movement

FIELD TESTED

yes

informally at Hines Veteran's Hospital and the Rehabilitation Institute of Chicago

REGULATORY APPROVAL

not applied for

WARRANTY PROVIDED

yes

FOR SALE

C. Beil Designs 5435 N. Artesian Avenue Chicago, IL 60625

F. Sammons Co., Inc. Box 32 Brookfield, IL 60513

HOW IT WORKS

Attach to furniture or equipment for support. Holds any size hard or soft cover book up to 8" x 11". Pages may be turned by hand or with the use of a mouth or head stick.

(Information provided by Carl H. Beil, C. Beil Designs.)



Photograph courtesy of Apollo Electronic Visual Aids

Possum Controls, Inc. 11 Fairacres Industrial Estate Windsor, Berkshire England

CONTACT PERSON

Ann F. Gurr Possum, Inc. P.O. Box 451 Midwood Station Brooklyn, NY 11230 (212) 243-1658

WHERE IT IS USED

Reading

PROBLEM(S) IT OVERCOMES

inability to turn book pages

FIELD TESTED

yes

Britain

REGULATORY APPROVAL

FDA

WARRANTY PROVIDED

yes

FOR SALE

Possum, Inc. P.O. Box 451 Midwood Station Brooklyn, NY 11230 \$625.00 + shipping

HOW IT WORKS

This battery operated machine turns the pages of common size books. It can be operated pneumatically or with light pressure microswitches. (See Possum Input Controls (p. 312) for types of input switches.) A page retainer holds the book flat. Adjustment can be made to accommodate paper quality and thickness and desired bookrest angle.

(Information based on Possum Controls, Inc. literature.)

PAGE TURNER



WTB, Inc. 1259 Millikin Pl., N.E. Warren, OH 44483 (216) 372-6316

CONTACT PERSON

WHERE IT IS USED

PROBLEM(S) IT OVERCOMES

inability to turn pages without assistance

FIELD TESTED

yes

sold to hospitals and individuals across U.S.A. and Canada

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

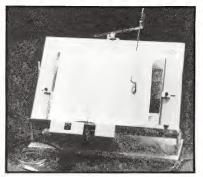
WTB, Inc. 1259 Millikin Pl., N.E. Warren, OH 44483 \$535.00

HOW IT WORKS

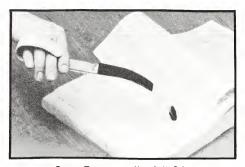
Reading

After the book is set in the turner at the position-line and the book's covers taped down, the user presses the switch to activate the weighted rollers. The roller will move to the edge of the page, lower itself, reverse and lift the page, winding until the page is taut and will peel off and be turned. The pages are held down by a thin nylon line. The unit can be used flat or at a 45° angle. It holds books or magazines up to 9"xll½"xl½".

(Information based on WTB, Inc. literature.)



Automaddak Page Turner



Page Turner - Hand Held



Page Turner - Mouth Held

Photographs courtesy of Maddak, Inc.

Manufactured by: Maddak, Inc. Pequannock, NJ 07440 (201) 694-0500

CONTACT PERSON

Fred M. Joslyn Maddak, Inc. Pequannock, NJ 07440 (201) 694-0500

WHERE IT IS USED

Reading

PROBLEM(S) IT OVERCOMES

manipulation difficulty

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

information not available

FOR SALE

Maddak, Inc. Pequannock, NJ 07440

Automaddak^R Page Turner \$471.00 Page Turner - Hand Held \$14.50 Page Turner - Mouth Held \$4.50

HOW IT WORKS

The Automaddak^R Page Turner accommodates any size book or magazine. Each page is turned automatically at the reader's command. The book or magazine is positioned against the back panel with both covers held in place by adjustable plastic clips. Operation of the Page Turner is controlled either by a breath switch which is sensitive to a puff of breath through a mouthpiece, or a small sensitive touch bellows control which responds to slight pressure on a plastic pad by any part of the body. The Page Turner can be adjusted from horizontal to almost vertical. The Page Turner -Hand Held is a curved polycarbonate tapered strip with foam rubber tip for easy flipping of pages (even heavy coated paper). The Page Turner - Mouth Held is made of light weight plastic with a serrated rubber tip for good paper contact. The upper end is heart shaped and flat with medium-soft rubber plates adhered to the surface for easy grip and comfortable contact with teeth.

(Information based on Maddak Catalog No. 479, 1979.)



Photograph courtesy of Apollo Electronic Visual Aids

Apollo Electronic Visual Aids 6357 Arizona Circle Los Angeles, CA 90045 (213) 776-3343

CONTACT PERSON

Dennis Allen Apollo Electronic Visual Aids 6357 Arizona Circle Los Angeles, CA 90045 (213) 776-3343 WHERE IT IS USED

Magnification

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

UL, OSHA

WARRANTY PROVIDED

yes

FOR SALE

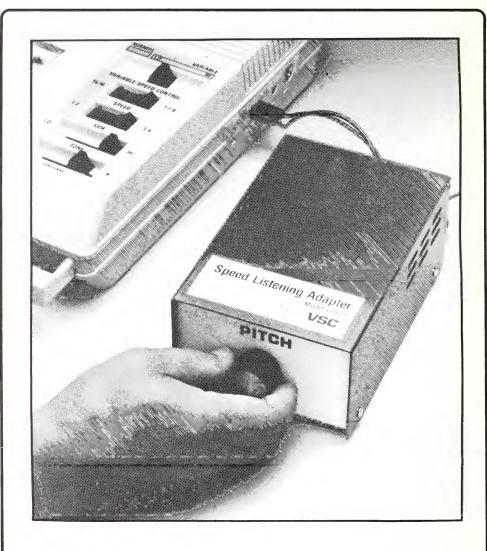
Apollo Electronic Visual Aids 6357 Arizona Circle Los Angeles, CA 90045

As of 1/1/80 PortaReader \$1,550.00 Deluxe PortaReader \$1,650.00

HOW IT WORKS

The PortaReader EVA is a portable, lightweight device consisting of a CRT viewing monitor mounted on a collapsible stand together with a video camera, zoom lens, and illuminator. The heavy gauge anodized aluminum platform is supported by three integrated retractable legs which easily fold into a compact carrying handle. There is ample work space beneath the lens. The PortaReader makes viewing of any ink printed material. photos, material across the room, or seeing what is being typed easier. It is possible to: 1. isolate one line (or more) of print at a time, 2. compensate for camera positioning so image is not upside-down or inside-out, and select black-on-white (positive) or white-on-black (negative) images. It has magnifying capabilities of 4X to 45X. Also available is the Deluxe Porta-Reader, which has a special zoom lens which allows ease in focusing.

(Information based on Apollo Electronic Visual Aids product literature.)



Photograph courtesy of Variable Speed Control Corporation

Variable Speed Control Corporation 185 Berry Street San Francisco, CA 94107 (415) 495-6100

CONTACT PERSON

Grady Hesters Variable Speed Control Corporation 185 Berry Street San Francisco, CA 94107 (415) 495-6100

WHERE IT IS USED

Listening Reading

PROBLEM(S) IT OVERCOMES

visual impairment; improves clarity of slowed speech

FIELD TESTED

yes

tested by VA; Arkansas Enterprises for the Blind; American Foundation for the Blind, and others

REGULATORY APPROVAL

UL on AC component

WARRANTY PROVIDED

yes

FOR SALE

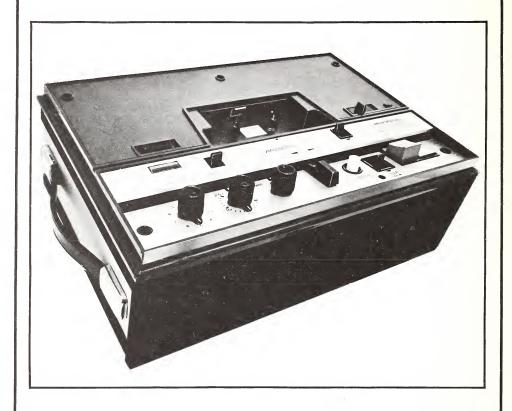
Variable Speed Control Corporation 185 Berry Street San Francisco, CA 94107 Also see dealer list in appendix. \$95.00

HOW IT WORKS

This device is designed to use with the Library of Congress (LOC) C-76, C-77 and later model 4-track cassette players. The listener can speed up a cassette on the LOC player, then pitch correct the "chipmunk" sound at up to 2.5 times faster than the recorded speed. It has braille markings and large print and braille instructions. Two permanently attached cords are designed to plug directly into the LOC player. One cord carries the high pitched speeded speech to the adapter, the other returns pitch-corrected speech to the player where it is heard through the player's speaker.

(Information provided by Irene Gilbert Mattei, VSC.)

VARISPEECH II RECORDER



Photograph courtesy of Lexicon, Inc.

Lexicon, Inc. 60 Turner Street Waltham, MA 02154 (617) 891-6790

CONTACT PERSON

Jack Letscher Lexicon, Inc. 60 Turner Street Waltham, MA 02154 (617) 891-6790 WHERE IT IS USED

Listening Reading

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

60 Turner Street Waltham, MA 02154 \$595.00 F.O.B. Waltham, MA

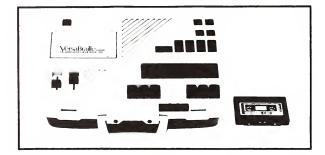
Lexicon, Inc.

HOW IT WORKS

Varispeech II is a recorder and a speech time compressor and expander which utilizes advanced digital processing techniques. It allows you to play back recordings at ½ to 2½ times the speed of the original, and preserves the speaker's original pitch and tonal qualities. It works like any other conventional cassette recorder, and requires no special training to use. The only nonconventional control is the speed factor knob which is calibrated and turned clockwise or counterclockwise to increase or decrease listening speed. Special options are available which allow use with the Library of Congress 4-track tape formats.

(Information provided by Nancy Greenfield, Lexicon, Inc.)

VERSABRAILLE SYSTEM



Photograph courtesy of Telesensory Systems Inc.

VERSABRAILLE SYSTEM

DEVELOPER

Telesensory Systems, Inc. 3408 Hillview Avenue Palo Alto, CA 94304 (415) 493-2626

CONTACT PERSON

John Beard, Manager North American Marketing Telesensory Systems, Inc. 3408 Hillview Avenue Palo Alto, CA 94304 (415) 493-2626

WHERE IT IS USED

Education
Filing
Reading
Recording Information
Writing

PROBLEM(S) IT OVERCOMES

blindness; storage and retrieval of braille materials

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Telesensory Systems, Inc. 3408 Hillview Avenue Palo Alto, CA 94304

HOW IT WORKS

The VersaBraille system is an electronic braille information system which records braille in electronic impulses on cassette tape and displays braille on a twenty character line of electromechanical cells. The VersaBraille system is a quiet and efficient writing, reading and notetaking system, and a compact way of storing brailled text. It is also an audio tape recorder which can record sound and braille on the same tape, and can provide an index and automatic retrieval system for both braille and audio materials. Attachment to computers, typewriters, or teletypewriters will increase the system's utility in many vocational settings. Various options are available at an additional cost.

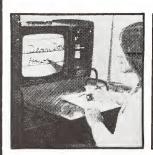
(Information reprinted with permission from Telesensory Systems Inc. literature.)

VIDEO VISUAL READ/WRITE SYSTEM





RS Series



Miniviewer



Commuter



Microviewer

Photographs courtesy of Visual-tek

VIDEO VISUAL READ/WRITE SYSTEM

DEVELOPER

Visualtek 1610 26th Street Santa Monica, CA 90404 (213) 829-6841

CONTACT PERSON

Hank Cunningham 1920 E. 87th Street Bloomington, MN 55420 (612) 854-6098

or Marc Stenzel Visualtek (213) 829-6841

WHERE IT IS USED

Reading

PROBLEM(S) IT OVERCOMES

visual impairment in reading and writing

FIELD TESTED

yes throughout U.S. and Canada

REGULATORY APPROVAL

Department of Building and Safety -Los Angeles, CA

WARRANTY PROVIDED

yes

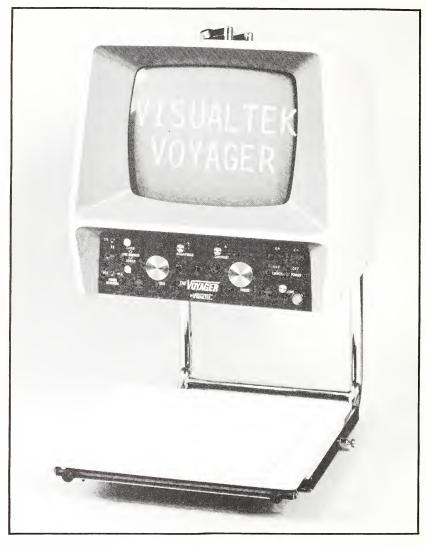
FOR SALE

Visualtek 1610 26th Street Santa Monica, CA 90404

HOW IT WORKS

The system utilizes a closed circuit TV camera, zoom lens and television monitor to magnify printed material and electronically enhance its brightness and contrast. User adjusts magnification, brightness and whether to view it as white on a black background or black on a white background. Some types of models are: RS - provides large field of view, high contrast levels and 60X magnification; RS-7 Typing Aid - by flicking a switch user can alternately view material in the typewriter and material being copied or simultaneously view these materials, used with either moving-platen or fixed-platen IBM selectric typewriters; Miniviewerportable with all components recessed for protection while in transit, provides 4X to 45X magnification, can accommodate over-sized materials: Commuter - small, portable with up to 15X magnification; Microviewer - added to an RS series or miniviewer, user can simultaneously view the magnified microfiche and his/her own note taking on a split screen. Also available is a drafting camera base and aids for viewing computer display terminals, see Cathode Ray Tube Viewing System.

(Information based on Visualtek literature.)



Photograph courtesy of Visualtek

VOYAGER

DEVELOPER

Visualtek 1610 26th Street Santa Monica, CA 90404 (213) 829-6841

CONTACT PERSON

Hank Cunningham 1920 E. 87th Street Bloomington, MN 55420

or Marc Stenzel Visualtek (213) 829-6841

WHERE IT IS USED

Reading

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

States of California, Ohio, New York, Florida, Maryland, Illinois, Texas, Pennsylvania

REGULATORY APPROVAL

approval pending

WARRANTY PROVIDED

ves

FOR SALE

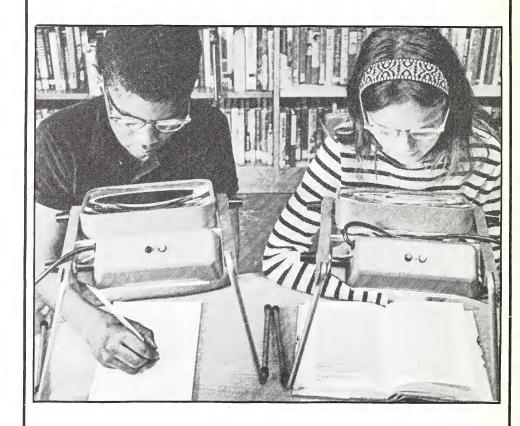
Visualtek 1610 26th Street Santa Monica, CA 90404

HOW IT WORKS

This is a portable zoom-lens reading system which has a large screen with a 12" diagonal CRT providing 3x to 45x magnification. The control knobs, tactually different, are on the front panel. The system features a preset aperture allowing instant setting of the optimum lens opening which can also be manually changed. This unit has type-writer capabilities. A swivel mirror doubles as a built-in lens cover when Voyager is not in use. The user can adjust the image to be black on white or white on black. Support legs recess inside the unit for ease in travel.

(Information based **o**n Visualtek literature.)

VSi MASTERLENS SYSTEMS



Photograph courtesy of EdnaLite Corporation

EdnaLite Corporation 200 N. Water Street Peekskill, NY 10566 (914) 737-4100

CONTACT PERSON

Corinne Cohen
Manager, Vision Systems
Division
EdnaLite Corporation
Peekskill, NY 10566
(914) 737-4100

WHERE IT IS USED

Fine hand work Reading

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

user satisfaction expressed in letters to EdnaLite

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

ves

FOR SALE

EdnaLite Corporation 200 N. Water Street Peekskill, NY 10566 \$197.00 + shipping

HOW IT WORKS

VSi PT is a portable table model optical system made from a homogeneous optical glass measuring 6"x8". It is designed for expansive viewing and working with both eyes open. When the curved side is up, the lens can be used for relaxed reading allowing free head movement. When the flat side is up, the lens can be used to concentrate on a central working area permitting hand manipulation of items under the lens.

(Information based on EdnaLite Corporation borchure.)



RECREATION

Bowling Ball Guide .	•	•	•	•	•	•	•	•	•	590
Card Holder						•	•	•	•	592
The Game Center						•	•	•	•	594
Precision Wheelchair	F	ли:	inr	nei	nt					E06

BOWLING BALL GUIDE



Dan Golden
CETA Welding Instructor
Wisconsin Indianhead
Technical Institute
New Richmond Campus
1019 South Knowles Ave.
New Richmond, WI 54017
(715) 246-6561

CONTACT PERSON

Dan Golden, WITI or Ron Zacharski, Activity Director St. Croix Health Center New Richmond, WI 54017 (715) 246-6991

WHERE IT IS USED Recreation

PROBLEM(S) IT OVERCOMES

inability to perform movements necessary to bowl in traditional manner

FIELD TESTED

yes

located and used by the St. Croix Health Center - New Richmond, WI

REGULATORY APPROVAL

no

WARRANTY PROVIDED

not applicable

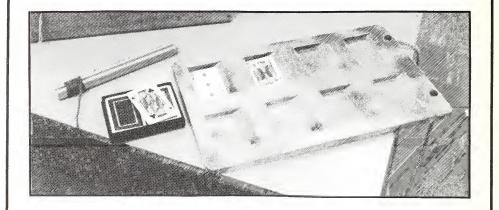
FOR SALE

May be made at a minimal cost.

HOW IT WORKS

The guide is positioned at the back of the bowling alley - close to where one would release the bowling ball. The individual using the guide would then roll his or her ball down the decline. It is important that the two parallel rods are the "right" distance apart or the ball will drag.

(Information based on personal interview.)



CARD HOLDER

DEVELOPER

Dave Bates Northern Wisconsin Center for the Developmentally Disabled Box 340 Chippewa Falls, WI 54729 (715) 723-5542

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Recreation

PROBLEM(S) IT OVERCOMES

organization

FIELD TESTED

yes

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

HOW IT WORKS

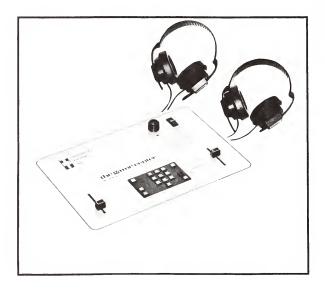
The board was designed to assist blind students playing a solitaire game called Cover the Pairs. The braille cards are placed in the individual spaces according to the card game being played. They remain in piles that are reasonably easy to locate.

(The grooved rectangular piece of wood

(The grooved rectangular piece of wood to the left of the card holder, is used to make uniform lengths of yarn when rug hooking.)

(Information based on personal inter-view.)

THE GAME CENTER



Photograph courtesy of Telesensory Systems Inc.

Telesensory Systems, Inc. 3408 Hillview Avenue Palo Alto, CA 94304 (415) 493-2626

CONTACT PERSON

Gayle Bruglar Telesensory Systems, Inc. 3408 Hillview Avenue Palo Alto, CA 94304 (415) 493-2626

WHERE IT IS USED

Recreation

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not availble

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Telesensory Systems, Inc. 3408 Hillview Avenue Palo Alto, CA 94304 \$995.00

HOW IT WORKS

The Game Center is a series of eight electronic games relying exclusively on auditory cues. It uses a microprocessor to generate electronically synthesized speech and other audible cues that provide all needed game information. The Game Center offers contests of chance, reaction time, memory, strategy and ear-hand coordination.

The playing surface of the Game Center is a numerical keyboard arranged in a push-button telephone format, with a series of easy to remember command keys. All of the keys give spoken verification when pressed. A brief initial orientation is all that is needed to play any of the games.

(Information reprinted with permission from Telesensory Systems, Inc. literature.)

PRECISION WHEELCHAIR EQUIPMENT

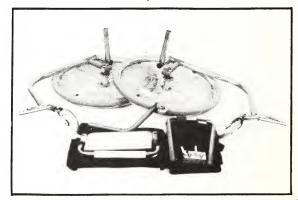


Basketball Chair



Track Chair

Chair in Collapsed Position



Photographs courtesy of Production Research Corp.

PRECISION WHEELCHAIR EQUIPMENT

DEVELOPER

Production Research Corp. 10217 Southard Drive Beltsville, MD 20705 (301) 441-2332

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Sports Wheelchair mobility

PROBLEM(S) IT OVERCOMES

maneuvering a wheelchair

FIELD TESTED

yes

by users in competition and everyday use

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Production Research Corporation 10217 Southard Drive Beltsville, MD 20705 or call for location of nearest dealer

HOW IT WORKS

Wheelchair parts that are durable, lightweight and compatible with standard wheelchairs, have been designed to improve use of existing wheelchairs. Some parts are made for use in sports. Front caster wheels, 5" and 8" are made of precision sealed bearings for basketball, racing and everyday usage. An 8"x14" caster wheel and tire assembly is made of a lightweight, strong plastic, using a sealed bearing and internal spacer unit to minimize play and flutter. tires are a high pressure type for easy rolling. This is designed for use everyday, in track and in marathons. Some of the basic features of the track and basketball chairs are that they are of lightweight design, (under 30 lbs.), have a single piece footplate, built-in cambered rear wheels for easy pushing and quick turning, a take-apart and collapsing system which gives the user portability and a seat set at a tilt with adjustable sitting positions.

(Information based on Production Research Corporation literature.)



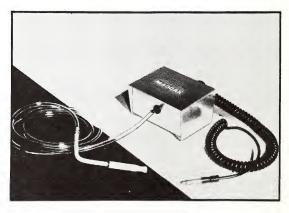
SAFETY

Alarms and Buzzers	•	•	•	•	•	600
Vibrating Pager	•		•			602
Visual Security Alarm System						604
Visual Smoke Detectors						606

ALARMS AND BUZZERS



The Sound/Off Alarm



Photographs courtesy of Maddak, Inc.

The Puff'n Buzzer

ALARMS AND BUZZERS

DEVELOPER

Manufactured by: Maddak, Inc. Pequannock, NJ 07440

(201) 694-0500

CONTACT PERSON

Fred M. Joslyn Maddak, Inc. Pequannock, NJ 07440 (201) 694-0500

WHERE IT IS USED

Communication Safety

PROBLEM(S) IT OVERCOMES

alerting someone of danger or that help is needed

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

information not available

FOR SALE

Maddak, Inc. Pequannock, NJ 07440

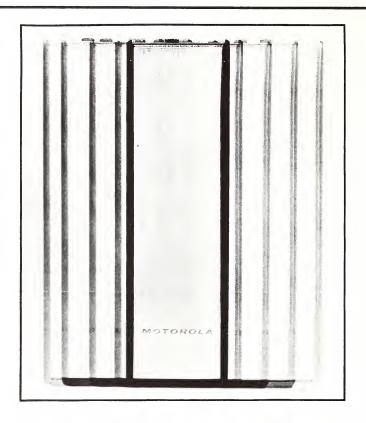
Sound/Off Alarm \$48.00 Puff'n Buzzer \$60.00

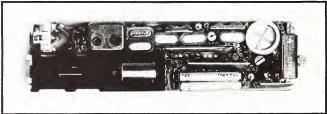
HOW IT WORKS

The Sound/Off Alarm is a safety must in monitoring critical life support equipment such as respirators and oxygen generators. It is also useful in alerting staff of power failure in testing and monitoring equipment. The audible alarm (85 dB) blares twice per second for up to 500 hours. It can be used with any piece of electrical equipment by simply plugging alarm into wall socket and plugging equipment into alarm. The Puff'n Buzzer is a breath operated call signal which replaces the customary push button signal used to call a nurse or attendant. A standard telephone-type plug-in-jack terminates a coiled retractile cord which connects to an aluminum housing. The housing contains a breath operated switch which the operator actuates by puffing into a small mouthpiece connected by tubing to the breath switch.

(Information based on Maddak Catalog No. 479, 1979.)

VIBRATING PAGER





Photographs courtesy of Motorola Radio, Inc.

VIBRATING PAGER

DEVELOPER

Motorola Radio, Inc. 1309 E. Algonquin Road Schaumburg, IL 60196

CONTACT PERSON

R.S. Menchel NCED/NTID One Lomb Memorial Drive Rochester, NY 14623 (716) 475-6544 (TTY or Voice)

WHERE IT IS USED

Communicating Safety

PROBLEM(S) IT OVERCOMES

communicating with someone who is deaf

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

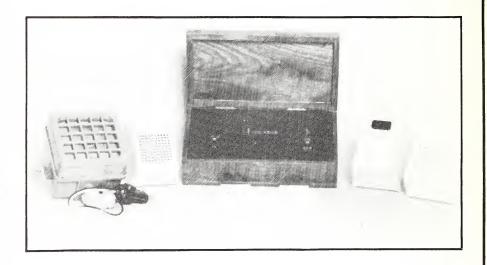
your local Motorola Radio, Inc. dealer \$400 \$15.20 monthly rental fee + charger

HOW IT WORKS

This pager is clipped to the belt or another article of clothing. It is used to inform a deaf person working alone in a laboratory that evacuation of building is required. The person is notified through security by sending radio wave to pager. Strong vibration is felt by wearer.

(Information provided by R.S. Menchel and Max Bentley.)

VISUAL SECURITY ALARM SYSTEM



Photograph courtesy of Howard M. Haines

Nationwide Flashing Signals System P.O. Box 6146 Silver Spring, MD 20906 (301) 593-2755

CONTACT PERSON

Howard M. Haines Nationwide Flashing Signals System P.O. Box 6146 Silver Spring, MD 20906 (301) 593-2755 (voice) (301) 593-2566 (TTY)

WHERE IT IS USED

Home Economics Homemaking Manufacturing Safety

PROBLEM(S) IT OVERCOMES

security hazard posed by inability to hear suspicious noises

FIELD TESTED

ves

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

yes

FOR SALE

Nationwide Flashing Signals System P.O. Box 6146 Silver Spring, MD 20906

complete set \$325.00

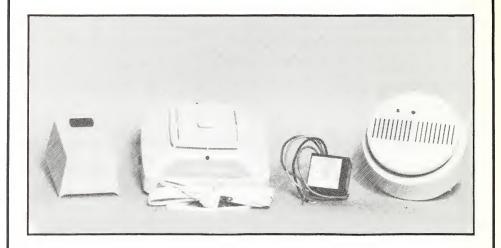
HOW IT WORKS

The Magnetic Switch Set is mounted on parting edge of window or door and is wired to the transmitter, which is plugged into nearest electrical outlet. Several Switch Sets may be used on one transmitter. Transmitter sends a violation signal to control center when protected door or window has been opened. If the Control Center has been turned on. it locks on to the signal from the Transmitter, waits 10-15 seconds, and then transmits an alarm signal to trigger all alarms. This happens even if the door has been quickly closed. The delay gives the homeowner time to disarm the Control Center before the alarms sound. Other features include:

- A 30-60 Second Exit Delay during which time the Control Center ignores all violations. This allows homeowner to exit without triggering alarms.
- An In/Out Switch for deleting the exit and reentry delays so that all the alarms will sound immediately upon the opening of a secured door or window.
- A Violation Light that comes on whenever a protected opening is not closed. It warns against arming the system before the building is secured.
- An Automatic Reset feature whereby the system will rearm itself if the door or window violated is subsequently closed.

(Information based on Nationwide Flashing Signals System literature.)

VISUAL SMOKE DETECTORS



Photograph courtesy of Howard M. Haines

Nationwide Flashing Signals System P.O. Box 6146 Silver Spring, MD 20906 (301) 593-2755

CONTACT PERSON

Howard M. Haines
Nationwide Flashing
Signals System
P.O. Box 6146
Silver Spring, MD 20906
(301) 593-2755 (voice)
(301) 593-2566 (TTY)

WHERE IT IS USED

Home Economics Homemaking Manufacturing Safety

PROBLEM(S) IT OVERCOMES

inability of a hearing impaired or deaf person to hear an auditory smoke alarm

FIELD TESTED

yes

REGULATORY APPROVAL

UL.

WARRANTY PROVIDED

yes

FOR SALE

Nationwide Flashing Signals System P.O. Box 6146 Silver Spring, MD 20906

\$47.50 - \$95.00

HOW IT WORKS

These smoke detectors are photoelectric.

Switched Receptacle

- Plugs into household receptacle (120 volt AC)
- Power is applied to outlet during alarm.
- Lights are plugged into this receiver (up to 300 watts).
- Intended for installation in bedroom.
- Can be moved from room to room.

Smoke Detector Transmitter

- Plugs into household receptacle (120 volt AC).
- Detects dangerous levels of smoke.
- Sounds loud penetrating alarm.
- Transmits continuous signal to receiver-alarm.
- Automatically resets (alarm ceases when smoke clears).
- Use as many detector transmitters as necessary to protect your home.

Horn (not shown in photo)

- Plugs into household receptacle (120 volt AC).
- Sounds a loud alarm (85db at 10 ft.)
- Intended for installation in your neighbor's house to alert him while you are away or on vacation.
- Can be moved from room to room.

(Information based on Nationwide Flashing Signals System literature.)

SEWING

Bernina Sewing Machine	610
Magnifier for Sewing Machine	612
Sewing Machine, Chest Operated	614
Sewing Machine Puff and Sip Control	
System for Paraplegic	616
Viking Sewing Machine	618

BERNINA SEWING MACHINE



Bobbin Holder



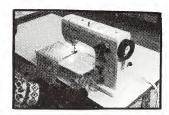
Handwheel Key



Needle Finger-Guard



Dials



Presser-Foot Lifter



Speed Regulator

Photographs courtesy of Fritz Gegauf Limited

Fritz Gegauf Limited Seestrasse 8266 Steckborn Switzerland (054) 8 29 21

CONTACT PERSON

Hans Boller Fritz Gegauf Limited Seestrasse 8266 Steckborn Switzerland (054) 8 29 21

WHERE IT IS USED

Sewing

PROBLEM(S) IT OVERCOMES

difficulty operating standard sewing machine due to visual impairment, hand or foot strength

FIELD TESTED

yes Sweden & Switzerland

REGULATORY APPROVAL

ш

WARRANTY PROVIDED

ves

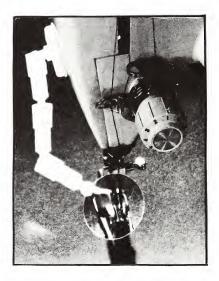
FOR SALE

See importers list in appendix. Priced at retail dealers' discretion.

HOW IT WORKS

Model 830H has several features to allow easier operation of the machine. A holder can be used to remove and insert the bobbin and the bobbin book is nonjamming. Turning a lever with one hand locks the handwheel; by applying light pressure to a large key, it can be released and retightened. Using a centering block places the needle in the correct position. A large handled screwdriver is used on the needle holder screw. A finger-quard on the needle is available. Threading of the machine can be done with one hand putting the thread through the slots; no eyes have to be threaded. A needle with a slot to the eve is an available accessary. Width, length, needle position and buttonhole dials are a non-slip design which rotate by pushing the large knob projections. Markings for width and length can be felt. A knob with large projections is used to raise and lower the feed-dog. An elongated lever is used for stitch selection; these markings can also be felt. The presserfoot snaps on and off. An adjustable guide can screw into the back of the presser-foot or base of the machine. The presser-foot is raised and lowered with an elbow or knee operated lever. The sewing speed regulator can be operated by foot, elbow, knee or chin, and a lock can be placed on it limiting it to two speed positions.

(Description based on Bernina literature verbal explanation provided by Hans Neunschwander, Hans Sewing Center -Madison, WI.)



Photograph courtesy of American Foundation for the Blind

CONTACT PERSON

Alex H. Townsend American Foundation for the Blind 15 West 16th Street New York, NY 10011 (212) 620-2169 WHERE IT IS USED

Sewing

PROBLEM(S) IT OVERCOMES

visual impairment

HOW IT WORKS

This flexible plastic device attaches to the side of a sewing machine to help guide the thread into the needle.

(Information based on American Foundation for the Blind literature.)

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

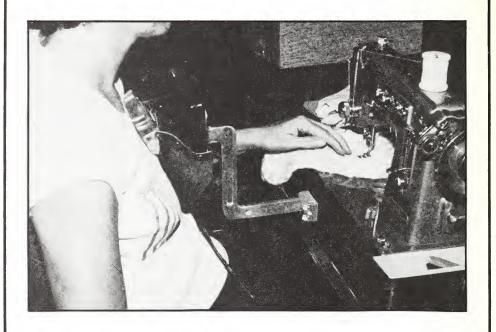
information not available

FOR SALE

American Foundation for the Blind 15 West 16th Street New York, NY 10011

\$2.75

SEWING MACHINE, CHEST OPERATED



Photograph courtesy of David F. Law, Jr.

David F. Law, Jr. Woodrow Wilson Rehab. Ctr. Rehabilitation Engineering Department Fishersville, VA 22939 (703) 885-9724

CONTACT PERSON

Same as Developer

WHERE IT IS USED
Sewing

PROBLEM(S) IT OVERCOMES

inability to operate a sewing machine
well enough to be employed

FIELD TESTED

yes

Woodrow Wilson Rehabilitation Center

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

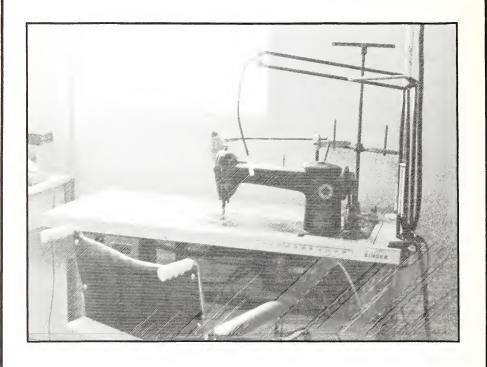
FOR SALE

no

HOW IT WORKS

The variable speed control of a commercially available sewing machine was mounted at chest level of the operator. This allows "hands-free" operation and very good control. Mounting arm is removable to allow normal usage.

(Information provided by David F. Law, Jr.)



Photograph courtesy of Don Warren and Ricardo Cerna

Clinical Convenience Products Contracting Serv. Div. 2070 Helena Street Madison, WI 53704 (608) 251-2882

CONTACT PERSON

Don Warren 2070 Helena Street Madison, WI 53704 (608) 251-2882

WHERE IT IS USED

Benchwork Home Economics Homemaking Sewing

PROBLEM(S) IT OVERCOMES

unable to operate foot control of an industrial sewing machine.

FIELD TESTED

yes

North Central Technical Institute -Wausau, WI

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Clinical Convenience Products 2070 Helena Street Madison, WI 53704 \$600 - custom modifications up

\$600 - custom modifications upon request

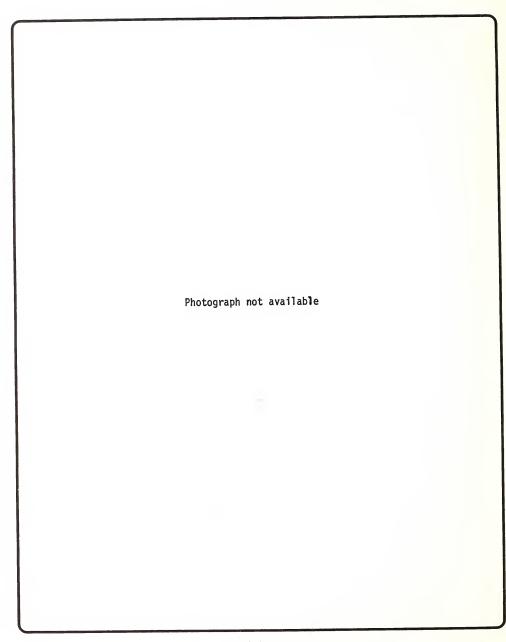
HOW IT WORKS

The foot control of an industrial sewing machine was modified with a puff and sip control that provides linear speed control; i.e., the harder the person puffs on the tube the faster the sewing machine will run.

When the individual sips on the tube the presser foot rises. Once desired speed is achieved by puffing, speed is maintained by blocking tube with the tip of the tongue. (Does not require constant puff to keep machine running.)

(Information provided by Ricardo Cerna, Rehabilitation Engineering Specialist, Wisconsin Division of Vocational Rehabilitation, and Don Warren.)

VIKING SEWING MACHINE



Husqvarna AB Fack S-561 81 Husqvarna SWEDEN

CONTACT PERSON

WHERE IT IS USED

Sewing

PROBLEM(S) IT OVERCOMES

difficulty operating standard sewing machine due to visual impairment and physical strength

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Viking Sewing Machine dealers

HOW IT WORKS

Several features make operation of the machine easier. A cassette and braille summary of the instruction book are available. Threading of the machine is done following open guides. The needle is slotted and enclosed by a finger guard. The thread tension knob has a rubber ring to make gripping easier. Notches in the presser foot and the needle plate groove are used to locate the needle. A large knobbed screwdriver is used on the needle holder screw. A lever on the presser foot pressure adjustment knob, makes it easier to alter the pressure settings when needed. The different settings are labeled with raised markings. The presser feet can be clipped on and off. The nonjam shuttle has a projecting finger grip on the door. Tongs are used to remove and insert the bobbin. Stitch selection dials have protruding levers for easy turning, are color coded to the stitch indicator and have braille symbols. The reverse button can be pressed with the finger, thumb or palm. A convex knob for the feed dog button can be operated with one finger. A rubber ring around the hand wheel eases gripping and turning, A protruding gear shift lever makes it easy to engage the slow speed gear. When the bobbin is placed on the gear shift spindle, the needle mechanism automatical ly disengages. The sewing speed control pedal is large and has a heel rest. Controls that can be knee, hand, or arm operated are also available.

(Information based on Viking brochure.)



SHOPPING Grocery Shopping Cart 622

GROCERY SHOPPING CART



Photograph courtesy of Safeway Stores, Inc.

Kermit Berge c/o Mel McCall Safeway Stores, Inc. 4990 Stockton Blvd. Sacramento, CA 95820

CONTACT PERSON

Felicia del Campo Safeway Stores, Inc. Oakland, CA 94660 WHERE IT IS USED

PROBLEM(S) IT OVERCOMES

unable to use a conventional shopping cart from a wheelchair

FIELD TESTED

yes

Safeway stores - Washington, D.C.

REGULATORY APPROVAL

WARRANTY PROVIDED

FOR SALE

Not for sale until mid 1981.

HOW IT WORKS

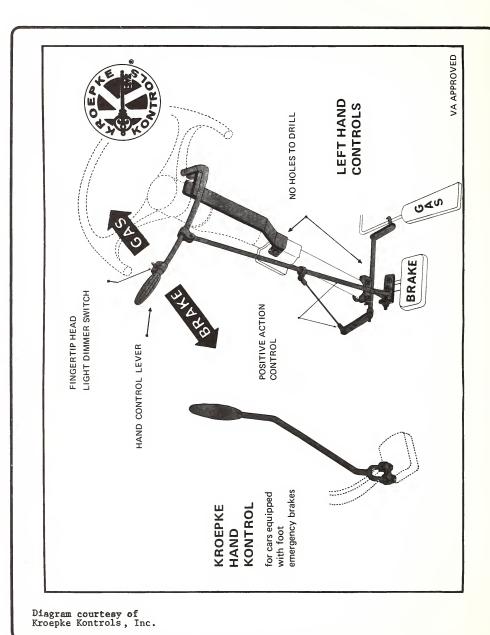
Shopping

The cart hooks to a wheelchair freeing the user's hands. On the left rear side of the cart is a telescoping arm that folds down. On the end of the arm is a "U" shaped piece that fits to the bar on the rear of the wheelchair armrest. Another "U" shaped piece then slides forward to fit the front armrest brace and locks into place. The cart will stay directly in front of the wheelchair rolling along with it on four swivel wheels. Once the user is familiar with its use, it takes only a few seconds to hook up.

(Information provided by Kermit Berge and Felicia del Campo, Safeway Stores, Inc.)

TRANSPORTATION

Car Controls	•	•	626
Driving Controls	•		628
Left Foot Gas Pedal Control for Car			630



Kroepke Kontrols, Inc. 104 Hawkins Street Bronx, NY 10464

CONTACT PERSON

Walter Kroepke Kroepke Kontrols, Inc. 104 Hawkins Street Bronx, New York 10464 (212) 885-1547

WHERE IT IS USED

Transporation

PROBLEM(S) IT OVERCOMES

inability to operate car controls with lower extremities

FIELD TESTED

yes

company has had 27 years of experience manufacturing driving controls

REGULATORY APPROVAL

VA approved

WARRANTY PROVIDED

yes

FOR SALE

Brake Control	\$ 99.50
Single Lever Gas and Brake	
Control	139.50
Spinner Knob	27.50
Headlight Dimmer Switch	14.50
Hand Parking Brake	15.50

HOW IT WORKS

The <u>Brake Control</u> works with a lever action involving the brake only.
The <u>Single Lever Gas and Brake Control</u> involves both the brake and gas oper-

ations in one lever.
The <u>Spinner Knob</u> is a ball bearing con-

trol for improved control of the steering wheel.

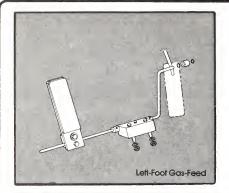
The <u>Headlight Dimmer Switch</u> is a hi-lo,

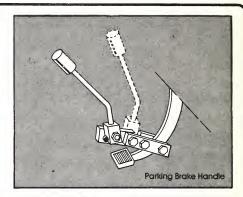
back and forth type motion.

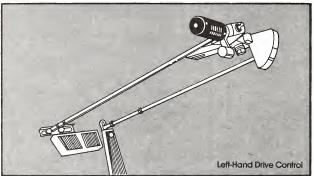
The <u>Hand Parking Brake</u> is for cars with foot control emergency brakes.

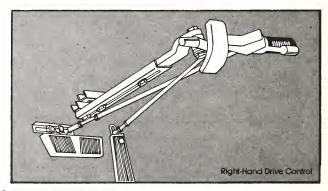
(Information based on company's brochure.)

DRIVING CONTROLS









Illustrations courtesy of Lehman Drug and Surgical Supply, Eau Claire, WI and Wells Engberg, Rockford, IL

DRIVING CONTROLS

DEVELOPER

Wells Engberg P.O. Box 6388 Rockford, IL 61125 (815) 397-6208

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Transportation

PROBLEM(S) IT OVERCOMES

inability to operate existing car controls

FIELD TESTED

yes

۷A

REGULATORY APPROVAL

it meets VA, DVR and DOT Wisconsin standards

WARRANTY PROVIDED

yes

FOR SALE

Contact Wells Engberg in Illinois for state-wide distributors.

In Wisconsin contact: Mobility Unlimited 7741 W. National Avenue P.O. Box 14427 Milwaukee, WI 53214

HOW IT WORKS

The <u>Left-Foot Gas-Feed</u> allows use of the <u>acceleration pedal</u> without use of right leg.

The Parking Brake Handle allows a person with limited leg movement to operate a parking brake. The handle folds forward to permit easy entrance and exit.

The <u>Left and Right Hand Drive Controls</u> allow operation of a vehicle by a person with limited mobility.

(Information based on product brochures.)

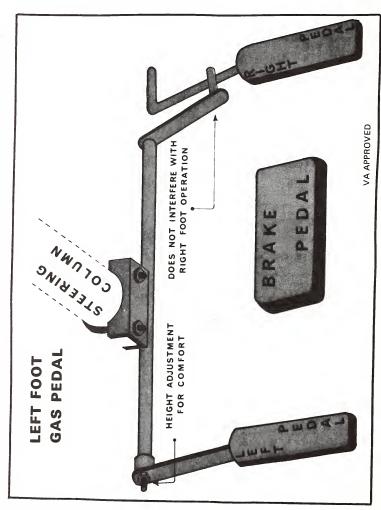


Diagram courtesy of Kroepke Kontrols, Inc.

Kroepke Kontrols, Inc. 104 Hawkins Street Bronx, New York 10464

CONTACT PERSON'

Walter Kroepke Kroepke Kontrols, Inc. 104 Hawkins Street Bronx, New York 10464 (212) 885-1547

WHERE IT IS USED

Transportation

PROBLEM(S) IT OVERCOMES

inability to use right foot in driving
a car

HOW IT WORKS

The left pedal is similar in shape, size, and location on the floor of the car to the right gas pedal. The left gas pedal is attached to a device which applies pressure to the right gas pedal. The device is secured at the steering column.

(Information based on company's brochure)

FIELD TESTED

yes

company has had 27 years of experience manufacturing driving controls

REGULATORY APPROVAL

VA approved

WARRANTY PROVIDED

ves

FOR SALE

left foot gas control - \$50.00

TYPING

Electric Typewriter		634
IBM Audio Typing Unit		636
Manual and Electric Typewriter .		638
Numeric Key Lock		640
Perkins Brailler		642
Reverse Indexing Typewriter		644
Talking Word Processing System .		646
Touch-N-Type TM Stick		648
Typewriter Control Systems		650
Typewriter Guard		652
Typewriter Mask Aid		654
Typewriter, One Hand, with Shield		656
Typewriter "Shift Easy" Shift Bar		658
Typing, One-Handed		660



Photograph courtesy of Olympia USA Inc

Olympia USA Inc Route 22 Somerville, NJ 08876 (201) 722-7000

CONTACT PERSON

Michael S. Pahuta Asst. Manager Marketing Services Olympia USA Route 22 Somerville, NJ 08876 (201) 722-7000

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

limited hand and arm muscle control

FIELD TESTED

information not available

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

yes

FOR SALE

Olympia USA Inc Route 22 Somerville, NJ 08876

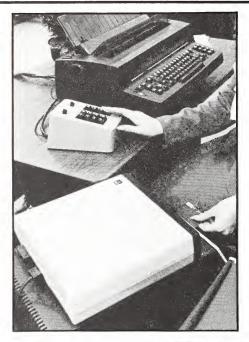
price of Standard Typewriter plus
\$250.00

HOW IT WORKS

A standard electric Olympia typewriter is equipped with a continuous feed paper attachment; a paper cutter for separating completed typing from the paper roll; a cushioned arm rest and an elevated keyboard mask for guiding fingers to the proper keys.

(Information based on Olympia literature.)

IBM AUDIO TYPING UNIT





Photographs courtesy of IBM Corporation

IBM Corporation 400 Parsons Pond Drive Franklin Lakes, NJ 07417 (201) 848-1900

CONTACT PERSON

J.G. Cesario Program Manager IBM Corporation 400 Parsons Pond Drive Franklin Lakes, NJ 07417 (201) 848-1900 WHERE IT IS USED Typing

PROBLEM(S) IT OVERCOMES

a blind person's inability to proof typed material without assistance from a sighted person

FIELD TESTED

no

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

yes

FOR SALE

Local Office Office Products Division IBM Corporation

\$170/rent; \$150/lease; \$5300/purchase

HOW IT WORKS

The IBM Audio Typing Unit consists of an audio keypad, an audio console, and an optional headset. To be operational it must be attached to one of four host typewriters: the IBM Mag Card II, the IBM Mag Card/A, the IBM Memory Typewriter, or the IBM Memory 100 Typewriter. The IBM Audio Typing Unit produces synthetic speech with an unlimited vocabulary. The synthetic speech can be heard in character, word, or line modes at operator discretion.

(Information based on IBM Corporation literature.)

MANUAL AND ELECTRIC TYPEWRITER



Photograph courtesy of Olympia USA Inc

Olympia USA Inc Route 22 Somerville, NJ 08876 (201) 722-7000

CONTACT PERSON

Michael S. Pahuta Asst. Manager Marketing Services Olympia USA Route 22 Somerville, NJ 08876 (201) 722-7000

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

visual impairment

A standard manual or electic Olympia typewriter is equipped with a braille keyboard; left and right braille margins; a braille margin scale and a braille scale on the bail roll shaft.

HOW IT WORKS

(Information based on Olympia literature.)

FIELD TESTED

information not available

REGULATORY APPROVAL

UL.

WARRANTY PROVIDED

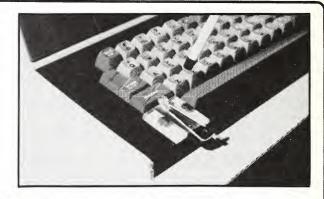
yes

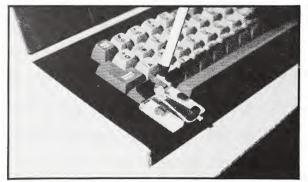
FOR SALE

Olympia USA Inc Route 22 Somerville, NJ 08876

Price of Standard Typewriter plus \$57.50

NUMERIC KEY LOCK







Photographs courtesy of David F. Law, Jr.

Woodrow Wilson Rehab. Ctr. Rehab. Engineering Dept. Fishersville, VA 22939 (703) 885-9724

CONTACT PERSON

David F. Law, Jr. Woodrow Wilson Rehab. Ctr. Rehab. Engineering Dept. Fishersville, VA 22939 (703) 885-9724

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

difficulty in manipulating the regular shift key lock of a typewriter

FIELD TESTED

yes

Woodrow Wilson Rehabilitation Center

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

no

FOR SALE

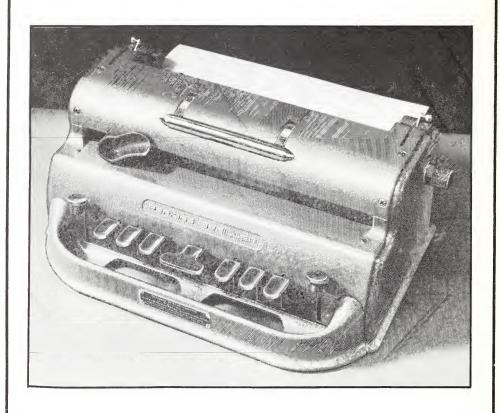
Rehabilitation Engineering Department Woodrow Wilson Rehabilitation Center Fishersville, VA 22939 \$15.00

HOW IT WORKS

I.B.M. 29 or 129 key punch machine does not have a shift key lock, so a Plexiglas lock is attached to the machine. It allows quadriplegics using mouthsticks and hemiplegics to type upper case letters.

(Information provided by David F. Law, Jr.)

PERKINS BRAILLER



Photograph courtesy of Howe Press

David Abraham Manufactured by: Howe Press of Perkins School for the Blind 175 N. Beacon Street Watertown, MA 02172 (617) 924-3490

CONTACT PERSON

Harry J. Friedman Howe Press of Perkins School for the Blind 175 N. Beacon Street Watertown, MA 02172 (617) 924-3490

WHERE IT IS USED

Brailling

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

ves

by users

REGULATORY APPROVAL

UL; Canadian Standard Association (for electric model)

WARRANTY PROVIDED

ves

FOR SALE

Howe Press of Perkins School for the Blind 175 N. Beacon Street Watertown, MA 02172 \$215.00 manual \$360.00 electric

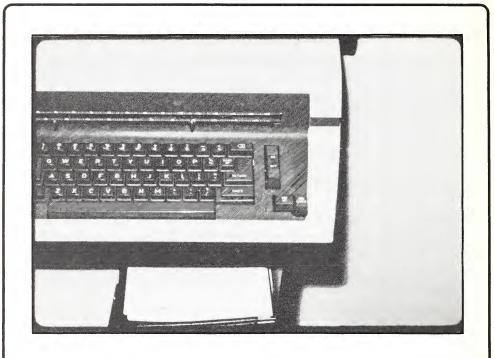
HOW IT WORKS

User inserts a sheet of heavy paper (measuring up to ll"xll½"), through a slot at the back of the machine. With the six keys the user produces the braille dot code. This model is used widely around the world as the braille code is adaptable to many languages. Various models of the Brailler have been designed to meet special needs of the user. There is a unimanual for persons who can only use one hand and one with straight extension keys for persons needing a mechanical assist due to limited arm strength. For descriptions of other models available contact Howe Press.

Other products available from Howe Press include slates, stylus, measurement and math materials, and Braille-Vision books.

(Information based on Howe Press literature.)

REVERSE INDEXING TYPEWRITER



Photograph courtesy of David F. Law, Jr .

Woodrow Wilson Rehab. Ctr. Rehab. Engineering Dept. Fishersville, VA 22939 (703) 885-9724

CONTACT PERSON

Randy Hinegardner Brown's Business Machines Staunton, VA 24401 (703) 886-3602

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

inability of quadriplegics to index paper up or down when using a mouthstick

FIELD TESTED

yes

Woodrow Wilson Rehabilitation Center and Market Area

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

yes

FOR SALE

Brown's Business Machines

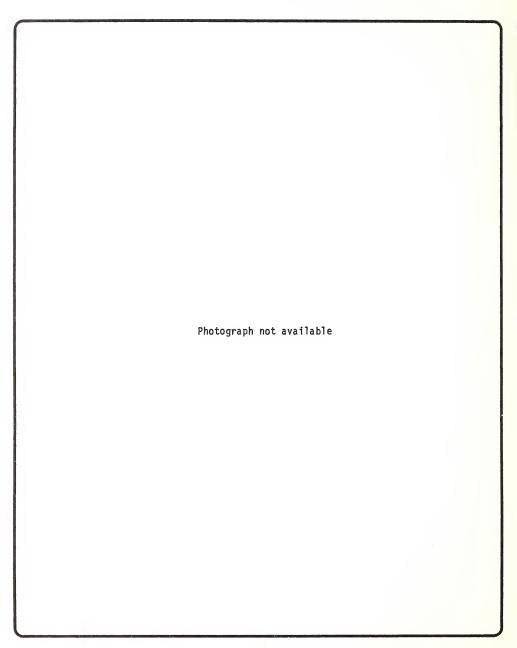
1617 W. Beverley St. Staunton, VA 24401 \$970.00 (price subject to change without notice.)

HOW IT WORKS

An IBM Selectric^R self-correcting typewriter was adapted with an externally motorized platen to give up and down indexing. This worked well, but modifications were expensive and endeavors to have it commercially available were unsuccessful. A Royal 5000CR was then selected, and through cooperation of a local distributor, internal modifications were made to add on this feature. This machine is also equipped with a paper inserter and mouthstick operable margins and tabs. Complete new units with modifications are available from the above. People who are quadriplegic may have varying degrees of upper trunk stability. By elevating the back of the typewriter the quadriplegic can more easily view the typed materials.

(Information provided by David F. Law, Jr.)

TALKING WORD PROCESSING SYSTEM



Maryland Computer Services 502 Rock Spring Avenue Bel Air, MD 21014 (301) 838-8888

CONTACT PERSON

Phyllis Barnes Maryland Computer Services 502 Rock Spring Avenue Bel Air, MD 21014 (301) 838-8888 WHERE IT IS USED

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not provided

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

ves

FOR SALE

Maryland Computer Services 502 Rock Spring Avenue Bel Air, MD 21014

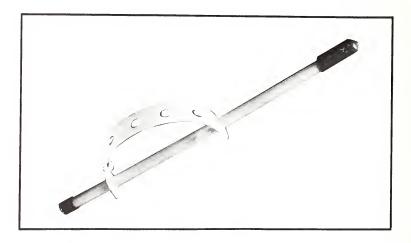
HOW IT WORKS

Typing

This (TWP) system stores all text in memory which allows the user to add, edit or print a document, adjust the format of a printed page, fetch a section of text, replace one section of text with another, insert or delete lines or characters. To check what has been entered, the user presses a key which tells the unit to speak any or all characters entered. A document can be proofed, corrected and edited using the audio indicator. Only corrections are entered to replace errors. The speech box has full word synthetic speech called Speak Easy. All text also appears on the visual display. An option of the TWP enables the system to automatically transcribe and emboss documents in American Standard Braille. The user enters the document on the keyboard and the command to translate and emboss. Any braille embosser can be used with this system.

(Information based on Maryland Computer Services literature.)

TOUCH-N-TYPETM STICK



Photograph courtesy of Gilbert L. Fink, Therafin Corporation

TOUCH-N-TYPETM STICK

DEVELOPER

Therafin Corporation 3800 S. Union Avenue Steger, IL 60475 (312) 755-1535

CONTACT PERSON

Gilbert L. Fink Therafin Corporation 3800 S. Union Avenue Steger, IL 60475 (312) 755-1535

WHERE IT IS USED

Communication Computer Processing Typing

PROBLEM(S) IT OVERCOMES

loss of hand or finger muscle control

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Therafin Corporation 3800 S. Union Avenue Steger, IL 60475

\$3.25 each

HOW IT WORKS

This device is a 12" rod covered with plastic and with a Plastisol no-slip tip. It has an adjustable loop that can be raised, lowered or shortened for individual use. It can also be used as a mouthstick. The stick can be used to operate typewriters, telephones and computer keyboards.

(Information based on Therafin Corporation brochure.)

TYPEWRITER CONTROL SYSTEMS



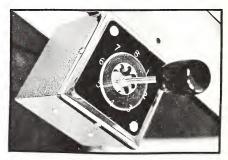
Footskate



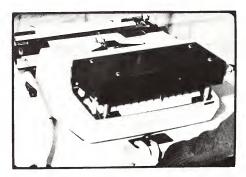
Splint



Heavy Duty Foot Switch



Joystick



Overdeck Conversion

Photographs courtesy of Possum Controls, Inc.

Possum Controls, Inc.
11 Fairacres Industrial
Estate
Windsor Berkshire
England

CONTACT PERSON

Ann F. Gurr Possum, Inc. P.O. Box 451 Midwood Station Brooklyn, NY 11230 (212) 243-1658

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

unable to use typewriter in conventional manner

FIELD TESTED

ves

Britain

REGULATORY APPROVAL

FDA

WARRANTY PROVIDED

yes

FOR SALE

Possum, Inc. P.O. Box 451 Midwood Station Brooklyn, NY 11230

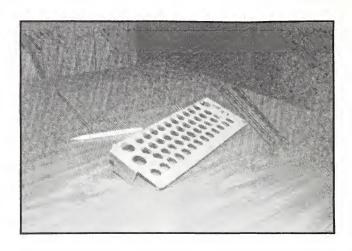
Price dependent on individual system requirements \$3,500 - \$8,600 range.

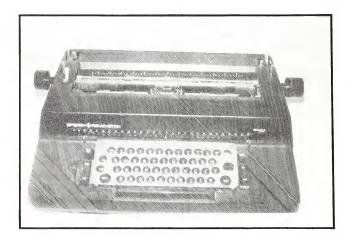
HOW IT WORKS Made to use with IBM, Smith Corona and

Brother typewriters, systems are operated with 1,'2, 4 or 8 microswitches. Type 1A/5A - operated by a single or two inputs, gives a speed of up to 10 words per minute (w.p.m.), supplied with an illuminated visual indicator. Type 8A - operated by 8 inputs, cannot be mouth operated. Switches are operated in sequence giving a typing speed of up to 40 w.p.m., no reaction time limit. There is also a Type 6A and Type 3A. Input Controls are trolley mounted, continuous stationery of up to 250 sheets is provided. Types of inputs: Joy Stick - small movement into any of 8 slots arranged around the Joy Stick activates microswitches which control the typewriter. Footskate - fine foot control used to select up to 8 microswitches with a 'skate' input. Splint microswitches mounted on a splint operated by flicker in a finger. See PossumTM Input Controls (p. 312) for other inputs. Mini Keyboard - by means of a stylus, a miniature keyboard can be used to operate a typewriter. Possum Expanded Keyboard - enlarged keyboard is connected to a typewriter, keys are spaced out and recessed. It gives a speed of 5 to 12 w.p.m., a delay can be introduced for use by those with a severe tremor. Overdeck Coversions placed over existing keys, removal of the overdeck enables typewriter to be used in conventional manner.

(Information based on Possum Controls, Inc. literature.)

TYPEWRITER GUARD





Photographs courtesy of Dan Golden

TYPEWRITER GUARD

DEVELOPER
Dan Golden
CETA Welding Instructor
Wisconsin Indianhead
Technical Institute
New Richmond Campus
1019 S. Knowles Avenue
New Richmond, WI 54017
(715) 246-6561

CONTACT PERSON
Jeanette M. Richardson
Supervisor
Office & Marketing Education Department
WITI-New Richmond Campus
1019 S. Knowles Avenue
New Richmond, WI 54017
(715) 246-6561

WHERE IT IS USED
Typing

PROBLEM(S) IT OVERCOMES

limited hand dexterity and control

FIELD TESTED

yes

in use at WITI - New Richmond, WI

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

FOR SALE

May be made at a minimal cost.

HOW IT WORKS

When the guard is placed over the keys of the electric typewriter, snapping into place, it serves to guide the typist to strike the correct key.

(Information based on personal interview.)

TYPEWRITER MASK AID



Photograph courtesy of Smith-Corona

CONTACT PERSON

Arthur P. Wales Smith-Corona SCM Corporation Consumer Products Div. 65 Locust Avenue New Canaan, CT 06840 (203) 972-1471 WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

lack of hand control

FIELD TESTED

ves

in use for 8-10 years

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

no

FOR SALE

Smith Corona National Service Store 46 Elm Street Cortland, NY 13045 \$27.50

HOW IT WORKS

The Mask Aid is available in the form of a kit for installation on a standard typewriter (available only on the SCM Model 2200). This auxilliary keyboard mask attaches flush or slightly above the keys. It prevents those persons with poor hand guidance control from tripping more than one key at a time. The Mask supports the hands so that a finger can locate the desired holes in the Mask to depress the desired key. A cover plate over the space bar also supports the hand to prevent accidental character spacing. An opening in the cover allows a finger to enter the opening to operate the space bar.

(Information based on Smith-Corona literature.)

TYPEWRITER, ONE HAND, WITH SHIELD



Photograph courtesy of Typewriting Institute for the Handicapped

Typewriting Institute for the Handicapped 3102 W. Augusta Avenue Phoenix, AZ 85021 (602) 939-5344

CONTACT PERSON

Kenneth Diamond Typewriting Institute for the Handicapped 3102 W. Augusta Avenue Phoenix, AZ 85021 (602) 939-5344

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

difficulties experienced by a one handed typist using a standard keyboard

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Typewriting Institute for the Handicapped 3102 W. Augusta Avenue

Phoenix, AZ 85021

Typewriter \$450 + shipping

Shield \$45

HOW IT WORKS

Typewriter - These are electric compact office-size portables with a 12 inch carriage. The typewriters are available in right hand or left hand models. The frequently used letters are concentrated in the center. This eliminates muscular contortions and strenuous reaches. On the standard keyboard, the left-hand typist does 43% of the typewriting with the little finger. The Dvorak One-Hand Typewriter Keyboard for left hand assigns only 15.3% of the typewriting load to the little finger, 18.3% to the ring finger, 29.7% to the middle finger, and 36.7% to the index finger. The right-hand keyboard provides almost identical distribution of the finger load. Shift keys are operated with little finger or thumb. special training manual has been prepared for both the right and left-hand typist using the Dvorak One-Hand Keyboards. It can be used either as a home study course or as a classroom text. It is included with every Dvorak One-Hand Typewriter sold by the Institute.

Shield - For those with a dexterity problem, Typewriting Institute has available a shield which is easily attached to the Dvorak One-Hand Typewriter or their standard typewriter. The shield helps the typist avoid striking adjoining keys. In addition, the shield is helpful to the handicapped typist who must rest his or her hand on the typewriter for support. The shield is also used when the typist must type with a hand, head or mouth stick.

(Information based on company literature.)

TYPEWRITER "SHIFT EASY" SHIFT BAR



Photograph courtesy of Smith Corona, Inc.

Typewriting Institute for the Handicapped 3102 W. Augusta Avenue Phoenix, AZ 85021 (602) 939-5344

CONTACT PERSON

Kenneth Diamond Typewriting Institute for the Handicapped 3102 W. Augusta Avenue Phoenix, AZ 85021 (602) 939-5344 WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

shifting for capital letters when typing

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Typewriting Institute for the Handicapped 3102 W. Augusta Avenue Phoenix, AZ 85021 \$45.00

HOW IT WORKS

Typewriting Institute for the Handicapped has developed a new optional shift key bar, the "Shift-Easy." Up until now, shifting for capital letters has been difficult for the one-hand typist where the typist is unable to use his or her other hand to depress the regular shift key. With Shift-Easy the one-hand typist can shift with the thumb or palm of the typing hand without going off home position. Shift-Easy is easily attachable and detachable from the Dvorak One-Hand Typewriter. No screws or tools are needed.

(Information based on company literature.)



Susanne Wynkoop Associated Craftsmen Easter Seals 15 Emerald Street Hackensack, NJ 07601 (201) 342-5734

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

difficulty keeping one's hand properly positioned on the keyboard

FIELD TESTED

yes

Associated Craftsmen/Easter Seals

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

not applicable

HOW IT WORKS

The Office Skills Program has evolved a rather simple method of teaching typing to people with the use of only one hand. They use standard electric typewriters and standard typewriting textbooks. Masking tape is applied to the A and F keys for right-handed people and to the J and semicolon keys for left-handed people. The difference in texture becomes a guide to proper finger placement. The hand hovers about one-half inch over the keys.

Although a company has invented a onehanded typewriter, the Office Skills Program feels it is impractical to assume that people will bring their portable typewriter to employment interviews and later to the job. Further, it is felt that the use of a "special" typewriter classifies them as "different" or "inferior" and emphasizes the negative aspects of a person's disability. Indeed, people have reported that when they used a standard typewriter and on the job achieved office typing speed levels with one hand, they were made to feel "special" and "superior" and this produces a sense of accomplishment in the disabled worker.

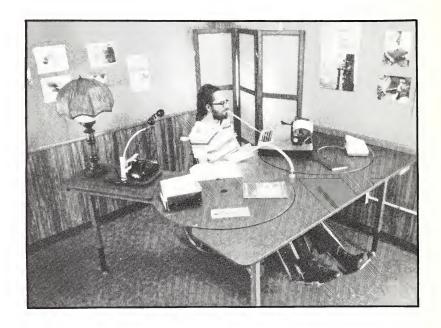
(Information provided by Susanne Wynkoop.)



WORK TABLES

Desk, Twin-Turntable	664
LaBerne Work Tables	666
Table, Adjustable Height	668
Tables	670
Jniversal Desk	672
Work Table	674

DESK, TWIN-TURNTABLE



Photograph courtesy of Arthur Heyer

Arthur Heyer Extensions for Independence P.O. Box 3754 Downey, CA 90242 (213) 862-2704

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Education Settings Office Settings

PROBLEM(S) IT OVERCOMES

difficulty reaching for and moving books, typewriters, or other office machines

FIELD TESTED

yes

three years of personal use; also used by over forty other quadriplegics in the U.S.A.

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

ves

FOR SALE

Extensions for Independence P.O. Box 3754 Downey, CA 90242

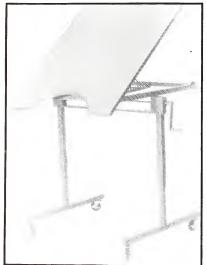
Twin-Turntable desk, medium \$715.00 Twin-Turntable desk, executive \$795.00 Single turntable desk \$595.00

HOW IT WORKS

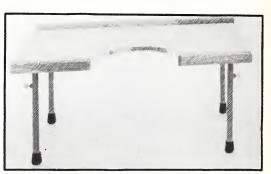
This desk has two revolving surfaces which can be easily rotated with a hand or a mouthstick. One rotating surface may be used for reference materials and files, while the other may contain type-writer, tape recorder, etc. The desk is of tubular frame construction and has detachable legs. The revolving surfaces are supported by a precision balanced system of ball bearings. A central opening, two inches in diameter, is in each turntable to allow electrical cords to run through. The top is finished in woodgrain formica.

(Information based on Extensions for Independence literature.)

LABERNE WORK TABLES



Adjustable Work Table



Cut-Out Work Table



Cut-Out Work Table

Photographs courtesy of LaBerne Manufacturing Co., Inc.

W. E. Berne P.O. Box 9245 Columbia, SC 29290 (803) 776-1115

CONTACT PERSON

Same as Developer

WHERE IT IS USED

General Use

PROBLEM(S) IT OVERCOMES

unable to use standard height table

FIELD TESTED

yes

in use in physical therapy departments all over U.S.A. and abroad

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

LaBerne Manufacturing Co., Inc. P.O. Box 9245 Columbia, SC 29290

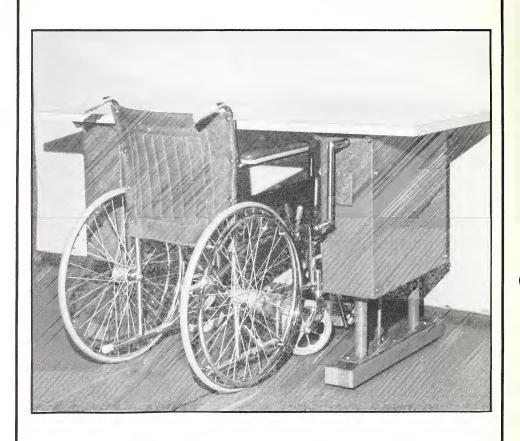
Adjustable Work Table \$520.00 Cut-Out Work Table (Adult) \$195.00 F.O.B. Columbia, SC

HOW IT WORKS

The adjustable work table is made of telescopic tubular steel mounted on 3" rubber tire casters with locks. It adjusts in height from 28" to 38" with the use of a hand crank. The top is hinged from the front and adjustable to a 45° tilt. It measures 32"x36" and has a front cut-out. The cut-out work table also has tubular steel legs. The top is 24"x36". The table adjusts in height from 22" to 35".

(Information based on LaBerne catalog, September, 1978.)

TABLE, ADJUSTABLE HEIGHT



Photograph courtesy of Brodhead Garrett Co.

Brodhead Garrett Co. 4560 East 71st Street Cleveland, OH 44105 (216) 341-0248

CONTACT PERSON

Same as Developer

WHERE IT IS USED
General Use

PROBLEM(S) IT OVERCOMES

difficulty experienced by wheelchair users in attempting to use common desks and tables

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Brodhead Garrett Co. 4560 East 71st Street Cleveland, OH 44105

Model No. HL-3060 \$645.00 Shipping Weight 232 lbs.

HOW IT WORKS

Adjustable height table is a suitable work area in the classroom for the student in a wheelchair. The table is adjustable by a pull out fold down handle. It adjusts from 28" to 38" high. Top surface is 1½" thick covered with laminated plastic, size 30" x 60".

(Information based on Brodhead Garrett Co. literature.)



Adjustable Height Tilt Top Work Table



Mobile Adjustable Height Wheelchair Table



Photographs courtesy of Bailey Manufacturing Co.

Individual Cut Out Table

Bailey Manufacturing Co. 118 Lee Street Lodi, OH 44254 (216) 948-1080

CONTACT PERSON

Adelle Bailey Manufacturing Co. 118 Lee Street Lodi, OH 44254 (216) 948-1080

WHERE IT IS USED

General Use

PROBLEM(S) IT OVERCOMES

unable to use standard height table

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Bailey Manufacturing Co. 118 Lee St. Lodi, OH 44254

School Desk - \$199.00 Tilt Top - \$275.00 Mobile Adjustable - \$360.00 Individual Cut Out - \$130.00

HOW IT WORKS

Several table models are available. The Adjustable Height School Desk adjusts from 24" to 34". It has a 9" x 14" cut out, a bookholder is on the right underside of the table top. It has plastic adjustable glides for uneven floors. The Adjustable Height Tilt Top Work Table adjusts from 25" to 29". The top tilts up to 45°. The Mobile Adjustable Height Wheelchair Table adjusts from 26" to 37". The top tilts up to 45°. It moves on swivel lock casters. The Individual Cut Out Table adjusts from 21" to 33". It has a 7" x 10" cut out, (other sizes available on request). It can be used in a sitting or standing position with the standing stabilizers. The door swings out or down and locks in place.

(Information based on Bailey Catalog No. 0583 April 1, 1979.)

UNIVERSAL DESK



Photograph courtesy of Maddak, Inc.

Manufactured by: Maddak, Inc. Pequannock, NJ 07440 (201) 694-0500

CONTACT PERSON

Fred M. Joslyn Maddak, Inc. Pequannock, NJ 07440 (201) 694-0500

WHERE IT IS USED

General Use

PROBLEM(S) IT OVERCOMES

confinement to a wheelchair

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

information not available

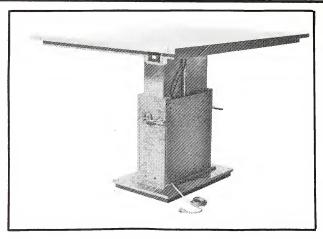
FOR SALE

Maddak, Inc. Pequannock, NJ 07440 \$420.00

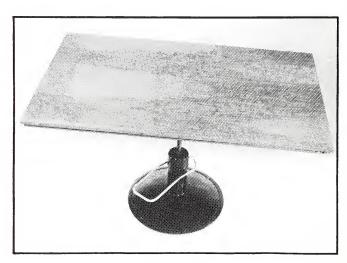
HOW IT WORKS

The Universal Desk is totally adjustable for all body sizes and types of work through stepless height adjustment. It accommodates all kinds of seats and many accessories are available. The worktop adjusts from 23.6" high to 43.3" maximum. Angle adjustment is from horizontal to 85° (almost vertical). It can be used from a sitting or standing position. All corners are rounded and have plastic edge strips. The desk is supplied with a front adjustable stopper bar to hold papers while tilted.

(Information based on Maddak Catalog No. 479, 1979.)



Electric



Hydraulic

Photographs courtesy of Hausmann Industries

Hausmann Industries 130 Union Street Northvale, NJ 07647 (201) 767-0255

CONTACT PERSON

Rose Rowan Advertising Manager Hausmann Industries 130 Union Street Northvale, NJ 07647 (201) 767-0255

WHERE IT IS USED

PROBLEM(S) IT OVERCOMES

unable to use standard height table

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

ves

FOR SALE

Hausmann Industries 130 Union Street Northvale, NJ 07647

HOW IT WORKS

General Use

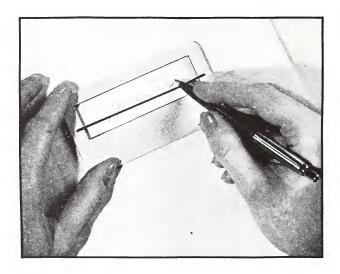
A heavy-duty work table with an H-type center column, it allows for the close approach of wheelchairs and can accommodate up to 6 people standing or sitting. The electric model is operated with a Hi-Low actuator controlled with a one button switch. The hydraulic model is controlled with a foot operated hydraulic lift release. The table height can be adjusted from 29" to 44". The Economy Hydraulic Work Table is not of heavy-duty construction. The table top height can be adjusted from 28" to 36" using a foot pedal control to operate the hydraulic base.

(Information based on Hausmann catalog.)

WRITING

APH Signature Guide .						•		678
Easy Grasp Pencil								680
Keitzer Check Writing	Gu	iic	de					68
Raised-Line Checkbook			•					684
Signature Guide								686

APH SIGNATURE GUIDE



Photograph courtesy of American Printing House for the Blind

American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206

CONTACT PERSON

Ralph E. McCracken American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206 (502) 895-2405

WHERE IT IS USED

General Use

PROBLEM(S) IT OVERCOMES

visual impairment; writing difficulty

FIELD TESTED

information not available

REGULATORY APPROVAL

U.S. Department of Health, Education and Welfare

WARRANTY PROVIDED

information not available

FOR SALE

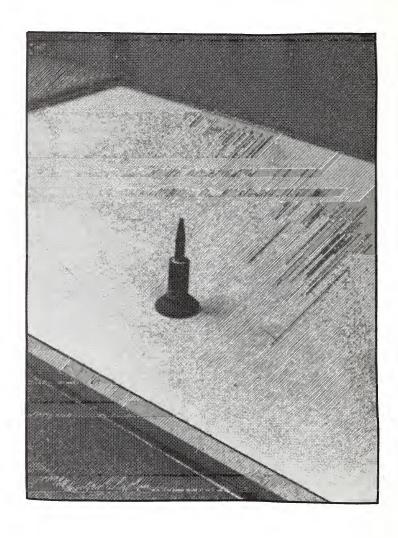
American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206

\$2.25

HOW IT WORKS

The signature quide is designed for use by blind people able to sign their names in script, but in need of a device to help them write on a straight line. It is made of annodized, natural-colored aluminum, with a rubber backing to help hold it in place when writing. A piece of rubber elastic stretched across the open frame gives a guideline for writing, at the same time permitting dropping below the line of writing for the lower ends of such letters as "j", "f", "g", etc. To use the frame, it should be placed in position with the rubber elastic running along the line of writing. Writing should be done by a pencil or ball-point pen.

(Information based on American Printing House for the Blind literature.)



Don Maurer Northern Wisconsin Center for the Developmentally Disabled Box 340 Chippewa Falls, WI 54729 (715) 723-5542

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Benchwork Bookkeeping General Use

PROBLEM(S) IT OVERCOMES

inability to grasp articles

HOW IT WORKS

The pencil holder increases the area to be grasped and its shape allows a different grasping action. The large part of the holder fits into the palm of the hand. A shorter pencil is more manageable than a longer one.

(Information based on personal interview.)

FIELD TESTED

yes

REGULATORY APPROVAL

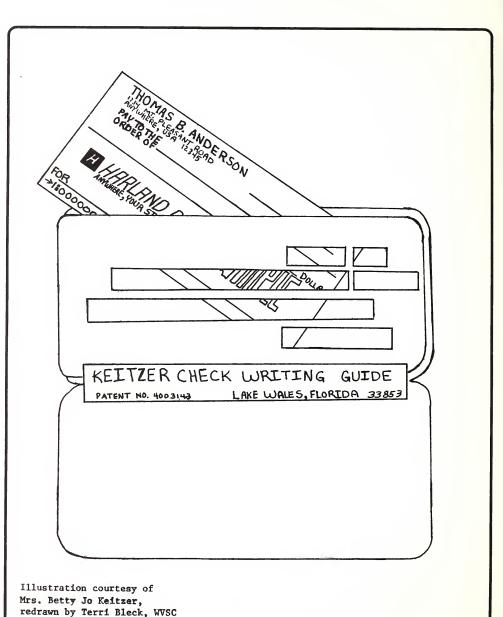
information not available

WARRANTY PROVIDED

information not available

FOR SALE

May be made at a minimal cost.



682

John and Betty Jo Keitzer 1129 Peninsula Drive Lake Wales, FL 33853 (813) 676-1805

CONTACT PERSON

Mrs. Betty Jo Keitzer 1129 Peninsula Drive Lake Wales, FL 33853 (813) 676-1805

WHERE IT IS USED

Writing checks

PROBLEM(S) IT OVERCOMES

writing difficulty; visual impairment

FIELD TESTED

yes

REGULATORY APPROVAL

no

WARRANTY PROVIDED

yes

FOR SALE

Mrs. Betty Jo Keitzer 1129 Peninsula Drive Lake Wales, FL 33853 \$7.00

HOW IT WORKS

A plastic template guide has cutouts corresponding to the spaces on a standard end stub check for date, payee, amount, written amount and signature. A base plate holds the guide steady while in use. Guides are available in right and left handed models.

(Information based on Keitzer literature.)

RAISED-LINE CHECKBOOK



Photograph courtesy of American Printing House for the Blind

Manufactured by: American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206

CONTACT PERSON

Ralph E. McCracken American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206 (502) 895-2405 WHERE IT IS USED

General Use

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

U.S. Department of Health, Education and Welfare

WARRANTY PROVIDED

information not available

FOR SALE

American Printing House for the Blind 1839 Frankfort Avenue Louisville, KY 40206

\$6.00 per book

HOW IT WORKS

The raised-line checkbook is printed with raised print lines on regulation checkbook paper which are interleaved with plain braille paper for stub record-keeping. The cover is made of regular bankbook stock and the entire booklet bound in perfect binding. The checks are perforated for easy detachment. There are 50 each of the checks and stubs per book.

(Information based on American Printing House for the Blind literature.)

SIGNATURE GUIDE



Photograph courtesy of Sped Publications

CONTACT PERSON

Billie Taylor Sped Publications 2010 Eagle View Colorado Springs, CO 80909 WHERE IT IS USED

Signing checks or other documents

PROBLEM(S) IT OVERCOMES

visual impairment

HOW IT WORKS

The guide is a plastic template with a rectangular cut out which is placed over the area to be signed.

(Information based on Sped Publications brochure.)

FIELD TESTED

yes

Colorado School for the Deaf and the Blind

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Sped Publications 2010 Eagle View Colorado Springs, CO 80909 \$1.00

Bibliography

The following is a listing of titles used in the catalog text. Other titles of interest to the reader will be found in Appendix E, Publications.

- Biddy, R.L., Smith, D.R., & Swarts, A.E. <u>Examples of jig and fixture design as applied to the severely disabled functioning in a sheltered workshop</u>. Houston, Texas: Texas Rehabilitation Engineering Center, 1976.
- Bonner, W., Eckles, C., & Stern, A. <u>A handbook of workshop production</u>
 <u>aids: Jigs, fixtures, tooling.</u> Sacramento, California: Department
 of Rehabilitation, Facilities Development Section, 1974.
- Clark, C., & Chadwick, D. <u>Clinically adapted instruments for the multiply handicapped: A sourcebook</u>. Westford, Massachusetts: Modulations Co., 1979.



APPENDIX A

Modifications to the Work Environment

In a publication such as this which concentrates on describing individual products, it is sometimes difficult to visualize how a product could be integrated into a work setting. To address this problem, Appendix A contains examples of nine different worksites which could be modified to aid not only employers who have sensory or lower body limitations but also able bodied employees. More specific modifications may still be required in order to make Worksite One and Worksite Two suitable for a particular disabled individual.

Worksite One and Worksite Two were developed by James Mueller of the Job Development Laboratory, George Washington University Rehabilitation Research and Training Center, 2300 Eye St, N.W., Washington, D.C. 20037, and are part of the publication entitled <u>Designing for Functional Limitations</u>. This publication was supported in part by HEW/RSA Grant No. 16-P-56803/3-15, and was completed in September, 1979. Reprinted with permission of the author. (Also see: Publications.)

DRAWERS SHOULD BE OPERABLE WITH ONE HAND DRAWERS WITH ROLLERS FOR EASY OPERATION U-SHAPED HANDLES: 4" x 1.5" (102mm x 38mm)

SEATING

AVOID SCULPTURED TEXTURES OR CHANGES IN DIRECTION OF GRAIN

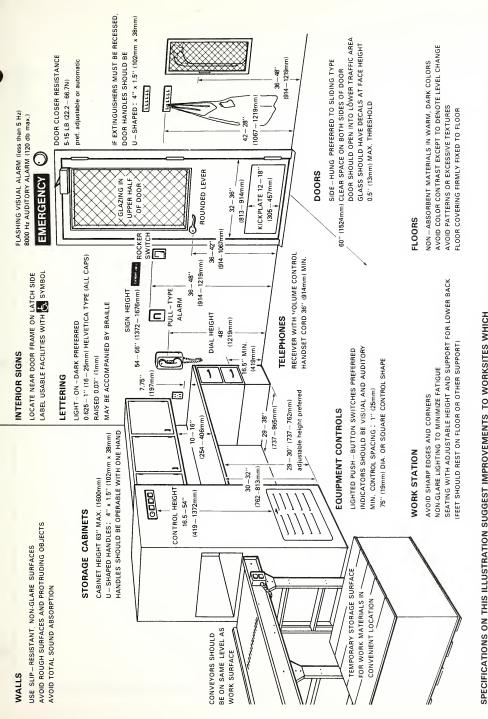
THIN, HEAVY - DUTY UNPADDED LOOP PILE CARPETING PREFERRED AVOID COLOR CONTRAST EXCEPT TO DENOTE LEVEL CHANGE

CARPETING SHOULD BE FIRMLY FIXED TO FLOOR

ADJUSTABLE HEIGHT AND SUPPORT FOR LOWER BACK FEET SHOULD REST ON FLOOR OR OTHER SUPPORT)

CONSIDERATIONS FOR MORE SPECIFIC FUNCTIONAL LIMITATIONS ARE DESCRIBED ON TRANSPARENT OVERLAYS. WILL AID ABLE—BODIED AS WELL AS PERSONS WITH SENSORY OR LOWER EXTREMITY LIMITATIONS. SPECIFICATIONS ON THIS ILLUSTRATION SUGGEST IMPROVEMENTS TO WORKSITES WHICH

WORKSITE



CONSIDERATIONS FOR MORE SPECIFIC FUNCTIONAL LIMITATIONS ARE DESCRIBED ON TRANSPARENT OVERLAYS. WILL AID ABLE—BODIED AS WELL AS PERSONS WITH SENSORY OR LOWER EXTREMITY LIMITATIONS.

WORKSITE 2

DENTAL TECHNICIAN WORKSITE



Photograph courtesy of the Innovative Services Office, Portland, Oregon

DENTAL TECHNICIAN WORKSITE

DEVELOPER

Dept. of Human Resources Vocational Rehab. Div. Innovative Services Office 2125 S.W. Fourth, Telco Bldg. Portland, OR 97201

CONTACT PERSON

James Mueller
Job Development Lab.
The George Washington
University
2300 Eye St., N.W.
Washington, D.C. 20037
(202) 676-3847

WHERE IT IS USED

Health

PROBLEM(S) IT OVERCOMES

mobility impairment due to spinal cord injury

FIELD TESTED

yes

used in one lab

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

not applicable

FOR SALE

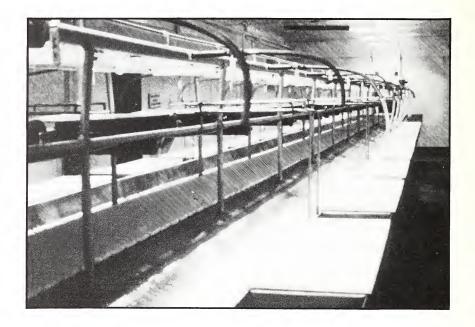
not applicable

HOW IT WORKS

Previously the work surface was above a cabinet which extended from the floor to the top of the work surface. The main modification was to remove the cabinet except for the drawer. This allows the technician's wheelchair to fit under the work surface, permitting the worker to reach his or her work easily.

(Information provided by James Mueller.)

FISH PROCESSING: PREPARATION LINE



Photograph courtesy of the Innovative Services Office, Portland, Oregon

FISH PROCESSING: PREPARATION LINE

DEVELOPER

Dept. of Human Resources Vocational Rehab. Div. Innovative Services Office 2125 S.W. Fourth, Telco Bldg. Portland, OR 97201

CONTACT PERSON

James Mueller
Job Development Laboratory
The George Washington Univ.
2300 Eye St., N.W.
Washington, D.C. 20037
(202) 676-3847

WHERE IT IS USED

Fish Processing

PROBLEM(S) IT OVERCOMES

reach impairment and weak grasp

HOW IT WORKS

Previously, the work surface consisted of small individual chopping blocks. These were replaced by large chopping blocks which allow the fish to slide easily. A mechanical reacher (see catalog entries) was also used by the disabled employee.

(Information provided by James Mueller,)

FIELD TESTED

yes

<mark>used in one fish processing plant</mark>

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

not applicable

FOR SALE

not applicable

INSURANCE CLAIMS ADJUSTER HOME WORKSITE



Photograph courtesy of the Job Development Laboratory

DEVELOPER

Job Development Laboratory The George Washington Univ. 2300 Eye St., N.W. Washington, D.C. 20037 (202) 676-3847

CONTACT PERSON

James Mueller
Job Development Laboratory
The George Washington Univ.
2300 Eye St., N.W.
Washington, D.C. 20037
(202) 676-3847

WHERE IT IS USED

Business Office Professional

PROBLEM(S) IT OVERCOMES

mobility and strength impairments due to spinal cord injury

FIELD TESTED

yes

used for one claims adjuster

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

not applicable

FOR SALE

not applicable

HOW IT WORKS

Major changes here include:

- a lever added to the dictabelt machine in order to make the buttons easier to use;
- 2) a Luxo arm addition to the phone;
- two separate work heights, one to clear the wheelchair, and the other to hold the equipment;
- 4) a desktop filing system.

(Information provided by James Mueller.)

PERSONNEL STATISTICIAN





Photographs courtesy of Pratt and Whitney



DEVELOPER

Pratt and Whitney Aircraft Group Manufacturing Division East Hartford, CT 06108

CONTACT PERSON

A.R. Colby
Manager of EEO Programs
Pratt and Whitney Aircraft Group
Manufacturing Division
East Hartford, CT 06108

WHERE IT IS USED

PROBLEM(S) IT OVERCOMES

dexterity and mobility problems caused by arthrogryposis

FIELD TESTED

not applicable

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

no

HOW IT WORKS

Personnel

On the job, this employee has little more trouble functioning than employees without disabilities. A few devices, such as those shown on the facing page, are simple, but mean the difference between the ability to work and unemployment. Because the "hold" button on his telephone is spring loaded and thus more difficult to push down than the other buttons, the company has provided the simple leverage device attached, allowing him to handle several calls as they come in. He has devised a simple scissors like tool (not shown) he uses for everything from picking up things he's dropped to straightening piles of paperwork on counters just out of his reach. When he first came to work at P&WA, he found it difficult to reach items placed on the counter by job applicants. The company installed a chute to ease the difficulty. Now, he has gotten to the point where he doesn't need the chute, although it is a convenience.

(Information based on literature provided by A.R. Colby.)

PHOTOGRAPHIC EQUIPMENT

Photograph not available	

DEVELOPER

Prof. Cavalliere Ketchum Art Department University of Wisconsin-Madison 6271 Humanities Building Madison, WI 53706 (608) 262-6598

CONTACT PERSON

Same as Developer

WHERE IT IS USED

PROBLEM(S) IT OVERCOMES

limited reach; limited hand and arm movement

FIELD TESTED

yes

used by one student

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

HOW IT WORKS

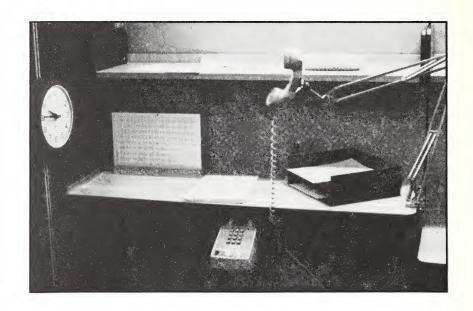
Photography

Professor Ketchum has modified various pieces of photographic equipment. To adapt an enlarger for a student who has limited arm and hand movement and reach range, he replaced the focus and adjusting knobs with a toggle nut with a tapered end. A handle was made by cutting down a golf club and attaching the top of a ratchet wrench to it. He also found that a towel hook with a suction cup could be used as a tripod. A small hole was drilled at the top of the towel hook for a screw. The towel hook easily goes onto any surface and a camera can be mounted atop the projecting screw.

By working with his students who need adaptations, Professor Ketchum has devised several simple and inexpensive changes for them. He is willing to explain the modifications he has made and to help others make adaptations for their own needs.

(Information based on personal interview.)

TELEPHONE SURVEY CLERK WORKSITE



Photograph courtesy of The Job Development Laboratory

TELEPHONE SURVEY CLERK WORKSITE

DEVELOPER

Job Development Laboratory The George Washington Univ. 2300 Eye St., N.W. Washington, D.C. 20037 (202) 676-3847

CONTACT PERSON

James Mueller
Job Development Laboratory
The George Washington Univ.
2300 Eye St., N.W.
Washington, D.C. 20037
(202) 676-3847

WHERE IT IS USED

Office Settings

PROBLEM(S) IT OVERCOMES

weakness resulting from muscular dystrophy

FIELD TESTED

ves

used in one office

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

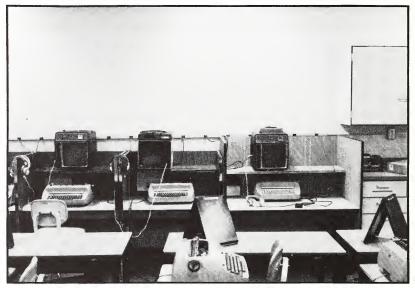
not applicable

HOW IT WORKS

The main modifications in this work site include;

- a height-adjustable work surface;
- 2) a phone suspended under the work table so that the buttons can be reached more easily:
- 3) a Luxo arm for the telephone receiver.

(Information provided by James Mueller.)



Far right section has been modified.

DEVELOPER
Group Effort by Some
Wisconsin Indianhead
Technical Institute
New Richmond Staff
1019 South Knowles Ave.
New Richmond, WI 54017
(715) 246-6561

CONTACT PERSON

Jeanette M. Richardson, Supervisor Office & Marketing Education Department Address and Phone Number Same as Developer WHERE IT IS USED

Work Site

PROBLEM(S)	IT	OVERCOMES
------------	----	-----------

extra space for wheelchair

HOW IT WORKS

This is an example of how a few extra inches in a work site area make available space for a wheelchair, yet, does not effect the usefulness or esthetic value of the room.

(Information based on personal interview.)

FIELD TESTED

yes

in use at WITI - New Richmond

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

not applicable

Appendix B Additional Available Resources

In this appendix is a suggested listing of resources where the reader can obtain information on other available products. Please be aware that this is not an exhaustive list.

Art

Art Studios 927 E. Oakton Street Elk Grove, IL 60007 (312) 593-6060

A Handicapped Potter's Wheel is available which was developed by Pottery Equipment, Inc., Silt, CO 81652, (303) 876-2935.

AUTOMOTIVE HAND CONTROLS

Blatnik Precision Controls 1523 Cota Avenue Long Beach, CA 90813 (213) 436-3275

Braun Corporation 1014 S. Monticello Winamac, IN 46996 (219) 946-6157

other offices: 13710 49th Street North
Clearwater, FL 33520
(813) 576-2737

3651 Sausalito Street Los Alamitos, CA 90720

(714) 891-4305

Creative Controls, Inc. 1354B Combermere Troy, MI 48084 (313) 585-0985

Company has wheelchair restraints and servo (remote operation) hand controls.

Die-A-Matic, Inc. 4004 Fifth Road North Arlington, VA 22202 (703) 522-3838 Company handles the System Franz controls for the Volkswagen Rabbit and handles and installs Gresham Driving Aids.

Drive-Master Corporation 16 Andrews Drive West Paterson, NY 07424 (201) 785-2204

Ferguson Auto Service 1112 N. Sheppard Street Richmond, VA 23230 (804) 358-0800

Handicaps Inc. 4335 S. Santa Fe Drive Englewood, CO 80110 (303) 781-2062

Manufacturing and Production Services 4664 Mercury Street San Diego, CA 92111 (714) 292-1423

Mobility Products and Design, Inc. 709 Kentucky Street Vallejo, CA 94590 (707) 642-8967

Mobility Systems 715 S. 5th Avenue Maywood, IL 60153 (312) 344-2705

Nelson Medical Products 5690 Sarah Avenue Sarasota, FL 33583 (813) 924-2058

Smith's Hand Control 1420 Brookhaven Drive Southhaven, MS 38671 (601) 393-0540

Trujillo Industries 5040 Firestone Boulevard South Gate, CA 90280 (213) 564-7943

Only manufactures steering assists.

CLOTHING

Amputee Shoe and Glove Exchange Dr. and Mrs. R.E. Wainerdi 1635 Warwickshire Drive Houston, TX 77077

A free information exchange to pair people who need the opposite shoe or glove and are of the same age, size and have similar taste.

Promote Real Independence for the Disabled and Elderly Fashions by PRIDE Sew With PRIDE 1159 Poquonnock Road Groton, CT 06340 (203) 447-7433

Clothing patterns are available which have been designed and tested for children and adults. Available on loan from P.R.I.D.E. is a Travel Trunk show. This is a trunk containing 150 garments which have been custom designed or altered in some way to meet a special need. Sew With PRIDE is a manual of sewing skills for changing store bought clothing. Step-by-step instructions in large type are accompanied by sketches. (Also see: Classroom Material.)

Vocational Guidance and Rehabilitation Services <u>Wings of VGRS</u> 2239 E. 55th Street Cleveland, OH 44103 (216) 431-7800

In the catalog, <u>Wings of VGRS</u> are sketches, descriptions and ordering information on adapted clothing for women and men. Items can be custom ordered.

COMMUNICATION AIDS

FM Atlas 4515 Avenue E Kearney, NE 68847 (308) 237-7953

This electronics mail order **co**mpany supplies equipment for an FM subcarrier signal. Circuits are available to tune into SCA (Subsidiary Communications Authorization, in Canada SCMO), a signal used for such programs as talking books and medical news.

COOKING

Amana Refrigeration, Inc. Amana, IA 52204 (319) 622-5511

A Braille Kit has been designed for Radarange Ovens, (models RR-8B and RR-7B). The kit includes Braille-marked polyester overlays that fit over the timer and power level dials. It also includes audio cassette tapes which are voice indexed to the information. A "Use and Care Manual", general cooking guidelines, instructions for preparing frozen and convenience foods and recipes are recorded on the tapes.

P.R.I.D.E. Foundation 1159 Poquonnock Road Groton, CT 06340 (203) 447-7433

Special tools and devices have been developed and tested to assist people with food preparation and general home management. (Also see: Classroom Materials.)

Rival Manufacturing, Co. 36th and Bennington Kansas City, MO 64129 (816) 861-1000 Telex 42-4126

The "Crock-Pot" slow cooker features easy to turn phenolic knobs of a no heat quality. Available is a 11 1/2" x 11" Braille edition of the "Crock-Pot" cookbook. It is made available through a volunteer project of: Braille Committee, Beth Shalom Sisterhood, 8831 Emsley Lane, Leawood, KS 66206, (816) 531-4535

Schwab Rehabilitation Hospital 1401 S. California Chicago, IL 60608 (312) 552-2010

The following suggestion was found in "Rehab Bits", a set of cards with independent living tips, no longer available. Place a large mirror at a 45 degree angle above the stove. A person in a wheelchair can then check the progress of cooking food by looking up into the mirror.

ENVIRONMENTAL CONTROL SYSTEMS

Fidelity Electronics, Ltd. 8800 N.W. 36th Street Miami, FL 33178 (305) 888-1000 Maddak, Inc. Pequannock, NJ 07440 (201) 694-0500

Medical Equipment Distributors, Inc. 1701 S. First Avenue Maywood, IL 60153 (312) 681-2828

Two environmental control systems are available from MED, the MED Quad System and the Micro-Dec.

INDEPENDENT LIVING AIDS

FashionAble Rocky Hill, NJ 08553 (609) 921-2563

Many self help items are available through their mail order catalog. FashionAble does not manufacture products.

Grayline Housewares 1616 Berkley Street Elgin, IL 60120 (312) 695-3900

Company has space saving items useful at home and at work. Items include carrying caddies, stackable baskets and dish racks. Most of the products have a vinyl finish.

Help Yourself Aids Box 15 Brookfield, IL 60513

J.A. Preston Corporation 71 5th Avenue New York, NY 10003 (212) 255-8484

> Their catalogs of equipment for health care and rehabilitation and the special education catalog contain items under such categories as perceptual motor, self help aids, communications, wheelchairs and lifters.

Lamson and Goodnow Manufacturing Company Shelburne Falls, MA 01370 (413) 625-6331

Company manufactures a pronged knife which can serve as both knife and fork.

Oxford Regional Health Authority "Equipment for the Disabled" Department H.A.I. Foredown Drive Portslade Brighton BN4 2BB England

In the series are included the following topics: communication, clothing and dressing for adults, home management, personal care, leisure and gardening, housing and furniture, hoists and walking aids, wheelchair and outdoor transport, writing and reading aids for the paralyzed.

P.R.I.D.E. Foundation 1159 Poquonnock Road Groton, CT 06340 (203) 447-7433

A variety of items are available to assist the user with food preparation, cleaning and grooming. (Also see: Classroom Material.)

Worcester Manufacturing Company 111 W. Timonium Road Timonium, MD 21093 (301) 252-0055

Company has wire made products useful at home and at work. Items include study stands, letter trays and hangers.

MECHANICAL "REACH ASSISTERS"

Fred Sammons, Inc. Box 32 Brookfield, IL 60513 (312) 971-0610

OPTICAL

American Thermo-Ware Company 16 Warren Street New York, NY 10007 (212) 267-1126

Several types of magnifying glasses are available through ATCO.

Bausch & Lomb <u>Magnifiers Catalog</u> P.O. Box 478, Dept. 3219 Rochester, NY 14602 (800) 828-1430 NY (800) 462-4893 Catalog gives an explanation of each type of magnifier as well as a glossary of terms.

Designs for Vision, Inc.
Optical Aids for the Partially Sighted
120 E. 23rd Street
New York, NY 10010
(800) 221-3476
(212) 674-0600
Telex 238413 DVI UR

The catalog gives a general explanation of each type of optic and explanation of fitting and lists the powers available.

Franel Optical Supply Co.

<u>Gadgets and Things for the Optical Trade</u>
P.O. Box 96

Maitland, FL 32751
(800) 327-2070

Orlando (305) 831-4000 Florida (800) 432-3770

This catalog, though geared for the "optical trade", contains a section on vision aids including magnifiers and prisms.

Keeler Optical Products Inc. 456 Parkway Lawrence Park Industrial District Broomall, PA 19008 (800) 523-5620 (215) 353-4350

North Central Sales Office 909 Chippewa Circle Carpentersville, IL 60110 (800) 523-5620 (312) 428-0440

Company has Low Vision Aids.

ORGANIZERS

Grayline Housewares 1616 Berkley Street Elgin, IL 60120 (312) 695-3900

Company has vinyl finished products such as stackable baskets and caddies useful at home and at work.

Worcester Manufacturing Company 111 W. Timonium Road Timonium, MD 21093 (301) 252-0055

Company has wire made products such as desk trays, book rests and copy holders useful at home and at work.

READING

Dialogue with the Blind 3100 S. Oak Park Avenue Berwyn, IL 60402 (312) 749-1908

Dialogue developed mailing containers for cassettes and open reel tapes which they sell. They also sell rubber stamps, mailing labels and cassette storage boxes obtained from other sources. Dialogue Magazine is published by this organization. (See: Publications.)

General Hardware Manufacturing Co., Inc. New York, NY 10013

An inexpensive, (\$1.49, Stock no. 385), page turner for persons who do not have manipulative use of their fingers, but can grasp or attach a pencil-like device to any holder and have limited arm movement. Attach paper clips to side edges of pages in a sequential staggered pattern, for use with a magnetic pickup tool, shaped like a pencil. Idea from Wisconsin's DVR Newsletter, April, 1980.

Pelco Sales, Inc. 351 E. Alondra Boulevard Gardena, CA 90248 (213) 321-5591

The Pelco Electronic Visual Aid is a protable television system which enlarges images 7 to 43 times their original size.

Touch Turner 443 View Ridge Drive Everett, WA 98203 (206) 252-1541

Page turning devices which operate on batteries are available for hardback and paperback books.

SCIENCE

Conco Industries, Inc. 30 Water Street West Haven, CT 06516 (203) 934-5271

Company has designed a portable science station for physically handicapped people.

SENSORY AIDS

American Foundation for the Blind
Sensory Aids for Employment of Blind and
Visually Impaired Persons: A Resource Guide
15 West 16th Street
New York, NY 10011
(212) 620-2000

This guide, compiled by Sensory Aids Foundation and published by AFB, is available in print and braille. It contains photographs, descriptions and vendor addresses of products modified for people who are visually impaired. (Also see: Classroom Material; Organizations.)

Deutsche Blindenstudienanstalt Aids for the Blind D-3550 Marburg 1 Am Schlag 8 P.O. B. 1160 Germany 64 051

This catalog, available in German and English, describes various products designed for people who are blind. Products include printing presses, typewriters, drawing instruments and recording equipment.

TACTILE AND BRAILLE SIGNS

Diversified Enterprises 5584 Willow Highway Grand Ledge, MI 48837 (517) 627-3137

Company has plates with individual raised and or braille letters and numerals, and plaques, directories and signs.

Scott Plastics Company P.O. Box 2958 Sarasota, FL 33578 (813) 355-5171 Company has developed fonts with individual braille characters on each font called Brailletters^R. They also carry individual raised letters for use indoors and outdoors.

TELEPHONE AIDS

AAL Communications, Inc. Box 365 Urbana, IL 61801 (217) 367-7373

Company manufactures and distributes a stationary teleprinter.

Acoustic Couplers are available from:

Applied Communications Corporation P.O. Box 55
Belmont, CA 94002
(415) 592-1622

Phone-TTY, Inc. 14-25 Plaza Road Fair Lawn, NJ 07410 (201) 796-5414

SACCO-Silent Aids Communication Corporation P.O. Box 1727 Washington, DC 20013

Fred Sammons, Inc. Box 32 Brookfield, IL 60513 (312) 971-0610

Infolink Corporation 1925 Holste Northbrook, IL 60062 (312) 291-2900

Available from this company is an electrowriter.

Interpretive Systems Corporation 6950 Oslo Circle Suite F Buena Park, CA 90621

Company manufactures and distributes a device that provides printed copy on standard paper.

Krown Research 1917 Greenfield Avenue Los Angeles, CA 90025

Company manufactures and distributes a Porta-Printer.

Local Bell Telephone

Many standard services already meet special needs. There are also services developed to help people who have a hearing, sight, speech or motion impairment. Description of services contained in booklet $\underline{\text{Services for Special Needs}}$.

Magsat Corporation 180 Roberts Street Hartford, CT 06106 (203) 525-4238

Company manufactures and distributes portable teleprinters.

Phonics Corporation 814 Thayer Avenue Silver Spring, MD 20910 (301) 588-8222

Company manufactures and distributes a TV Phone which is a semi-portable unit.

P.R.I.D.E. Foundation 1159 Poquonnock Road Groton, CT 06340 (203) 447-7433

Telautograph Corporation 8700 Bellanca Avenue Los Angeles, CA 90045 (213) 641-3690

Available from this company is a telepen.

Teletype Corporation 90 Clinton Road Fairfield, NJ 07006 (201) 575-8240

Company manufactures and distributes a teletypewriter.

TYPEWRITERS

International Business Machines Corporation

Modifications to the I.B.M. Mag Card Selectric Typewriter
and 2741 Communication Terminal for Braille Translation
and Embossing by N.C. Loeber (1976)

This booklet describes an experimental device that can simply and directly produce a document in either braille or inkprint. I.B.M. equipment is used to transliterate braille code to English (or other languages) and vice versa. This process provides the means for a two-way written communication between the visually impaired and sighted communities.

WRITING

Boston-Parkway Lions Club 81 Corey Street West Roxbury, MA 02132

The Banks Pocket Braille Writer, distributed world wide by Lions Clubs, prints braille on a narrow paper tape using a six key keyboard.

Appendix C Organizations

People who are handicapped are served by many organizations in various capacities. This appendix lists some of these organizations and their functions, (It is not an exhaustive list.) Some of the national organizations have state chapters. Chapter information can be obtained from the national office. State, regional or local offices may be listed in your city phone book.

Accent on Information (AOI) P.O. Box 700 Bloomington, IL 61701 (309) 378-2961

AOI is a computerized retrieval system of information on products and devices which assist disabled persons in such areas as grooming, furniture, home management, mobility, written and oral communication. Two types of information are available: references to publications, including sources, and brief descriptions of equipment with addresses of manufacturers and distributors. For a fee, searches of the AOI system are made on specific topics. AOI also produces publications providing information on new products. (See: Publications.)

Alexander Graham Bell Association for the Deaf, Inc. 1537 35th Street, N.W. Washington, DC 20007 (202) 337-5220

American Association for the Advancement of Science (AAAS) Project on the Handicapped in Science 1776 Massachusetts Avenue, N.W. Washington, DC 20036 (202) 467-4400

AAAS Project on the Handicapped in Science (PHS) promotes opportunities in science for people who are handicapped. PHS is an advocacy and information resource service for professionals and students of science who are handicapped. (Also see: Classroom Material: Publications.)

American Foundation for the Blind (AFB) 15 W. 16th Street New York, NY 10011 (212) 620-2000 AFB 1660 L Street, NW Washington, DC 20036 (202) 467-5996

AFB 500 N. Michigan Avenue Chicago, IL 60611 (312) 321-1880

AFB 100 Peachtree Street Atlanta, GA 30303 (404) 525-2303

AFB 1860 Lincoln Street Denver, CO 80203 (303) 861-9355

AFB 760 Market Street San Francisco, CA 94102 (415) 392-4845

AFB has consultant staff who work in the areas of children and youth; rehabilitation, orientation and mobility; employment; low vision; aging; radio information services; special population groups and recreation. Their headquarters are in New York and Washington, D.C. in addition to the four regional offices listed above. (Also see: Additional Available Resources; Classroom Material.)

American Parkinson Disease Association 147 E. 50th Street New York, NY 10022 (212) 421-5890

Amèrican Speech and Hearing Association 10801 Rockville Pike Rockville, MD 20852 (301) 897-5700

Amyotrophic Laterial Sclerosis Society of America 15300 Ventura Blvd., Suite 315 Sherman Oaks, CA 91403 (213) 990-2151

Arthritis Foundation 211 Park Avenue South New York, NY 10003 (212) 677-5790 Association for Children with Learning Disabilities (ACLD) 4156 Library Road Pittsburgh, PA 15234 (412) 341-1515

A national organization of parents and professionals. ACLD's vocational committee studies and promotes vocational needs of people who are learning disabled.

Association for the Education of the Visually Handicapped 919 Walnut Street Philadelphia, PA 19107 (215) 923-7555

Provides materials and information for people who are visually handicapped.

The Association for the Severely Handicapped (TASH) Information Department 1600 W. Armory Way Seattle, WA 98119 (206) 283-5055

Information and materials requests on all aspects of education and services for people who are severely handicapped are answered by TASH's Information Department. TASH maintains a library of resource materials. The Information Department also conducts surveys of integrated schools and parent needs.

Center for Labor Research & Studies Job-Related Physical Capacities Research Project (JRPC) Florida International University -Tamiami Campus Miami, FL 33199 (305) 552-2768

JRPC comparison system, is an interactive computer system used in conjunction with already existing computerized career information. A person uses the system to explore interest areas and in addition is evaluated by a physician using a JRPC format to analyze the individual's physical capacities for 98 different activities, e.g. walking, lifting, reaching. Ratings on these capacities are then fed into the computer. Jobs in which the individual has expressed an interest, (or all jobs meeting the person's physical specifications), are produced on the screen or print-out. The jobs are described in the same terms as the physical capacities which the physician rated. The kind of information a person receives includes a listing of the physical capacities necessary for the performance of a job, the percentage of people working at that job, (from JRPC field sample), who say that his or her capacities

would be sufficient, number of hours per day one might expect to use that capacity and aids which are easily available to help overcome a specific functional handicap at the worksite. (Also see Publications.)

Council for Exceptional Children (CEC) 1920 Association Drive Reston, VA 22091 (800) 336-3728 (703) 620-3660

CEC is a professional association interested in the educational needs of all exceptional children. CEC operates the Educational Resources Information Center, (ERIC) Clearinghouse on Handicapped and Gifted Children. The Clearinghouse has bibliographies and abstracts in such areas as program accessibility for handicapped students. Brochures are available describing the association's services and publications.

Electronic Industries Foundation (EIF) Project With Industry 2001 Eye Street, NW Washington, DC 20006 (202) 457-4913

EIF has developed a program to train people who are handicapped to work in the electronic industries. Rehabilitation resources and industries work together to identify, train and place potential employees. Currently area EIF offices are located in Los Angeles, San Francisco and Massachusetts.

Epilepsy Foundation of America 1828 L Street, N.W. Washington, DC 20036 (202) 293-2930

Handy-Cap Horizons, Inc. 3250 E. Loretta Drive Indianapolis, IN 46227 (317) 784-5777

A travel club which arranges group tours around the world for handicapped and elderly people.

Helen Keller National Center for Deaf-Blind Youths and Adults 111 Middle Neck Road Sands Point, NY 11050 (516) 944-8900 Industrial Home for the Blind operates the Center to provide evaluative and rehabilitative services to deaf-blind youths and adults in a residential setting. Reprints of articles of research on sensory aids conducted by the Center are available to inquirers. (Also see: Publications.)

Impart
Impart Demonstration Center
Bexar County Easter Seal Center
2203 Babcock Road
San Antonio, TX 78229
(512) 699-8988

Texas Rehabilitation Commission 118 E. Riverside Drive Austin, TX 78704 (512) 447-0100

Innovative Matching of Problems to Available Rehabilitation Technology (Impart), has engineers who help handicapped individuals make use of advanced technology. Engineers are located at the Texas Rehabilitation Commission and the Southwest Research Institute Applied Rehabilitation Engineering Center in San Antonio. Impart helps people to overcome difficulties encountered at the worksite and at home by locating existing adapted technology or creating new items. This service is available to any person who is vocationally handicapped and to individuals and agencies working with handicapped people.

International Association of Laryngectomees American Cancer Society 777 Third Avenue New York, NY 10017 (212) 371-2900

International Association of Parents of the Deaf 814 Thayer Avenue Silver Spring, MD 20910 (301) 585-5400

Just One Break (J.O.B.) 373 Park Avenue South New York, NY 10026 (212) 725-2500

J.O.B. is a job placement agency for people who are physically disabled. Free of charge, J.O.B. applicants receive skill testing, vocational evaluation and a 90 day follow-up after placement. These services are available to potential employees and employers in the N.Y.C. metropolitan area. In addition, J.O.B. conducts research and demonstration projects, provides training seminars and distributes printed material.

Library of Congress Division for the Blind and Physically Handicapped (DBPH) Washington, DC 20542 (202) 287-5100

The library maintains a collection of reading matter in braille and recorded form which is loaned free of charge to individuals unable to hold, handle or read conventional printed matter. Listening equipment, including attachments such as speed controls, are also loaned to eligible individuals. DBPH produces two publications which announce new books released, have feature articles and give information on library programs. The publications are Talking Book Topics, available in print and flexible disc, and Braille Book Review, available in print and braille. Reference circulars, available from DBPH, provide information on subjects relevant to blindness and physical handicaps. (See: Publications.) The Library of Congress works with a network of cooperating local libraries to distribute reading material and equipment. Many local libraries maintain their own special materials collection. Contact your local library for more details.

Mainstream, Inc. 1200 15th Street, NW Washington, DC 20005 (800) 424-8089 also for TTY (202) 833-1136

This organization provides information on federal laws and regulations concerning employment and education of handicapped people. Their hotline, equipped with a TTY, is answered by people who will provide information to questions on compliance with affirmative action regulations. If unable to answer questions, a confidential referral is made to the appropriate federal office. Mainstream produces a series of publications and sponsors conferences on issues regarding rights of handicapped persons.

Muscular Dystrophy Associations of America, Inc. 810 Seventh Avenue New York, NY 10019 (212) 586-0808

Myasthenia Gravis Foundation, Inc. 15 E. 26th Street New York, NY 10010 (212) 889-8157

National Amputation Foundation 12-45 150 Street Whitestone, Long Island, NY 11357 (212) 767-8400 National Association for Retarded Citizens 2709 Avenue 'E' East Arlington, TX 76011 (817) 261-4961

National Association for Visually Handicapped (NAVH) 305 E. 24th Street
New York, NY 10010
(212) 889-3141
and
3201 Balboa Street
San Francisco, CA 94121
(415) 221-3201

NAVH provides publications (see: Publications); adult and youth services including group programs, counseling to families and programs for the elderly; parent discussion groups; professional and public education; field testing of optical aids in cooperation with manufacturers and information and referral to community services.

National Association of the Deaf 814 Thayer Avenue Silver Spring, MD 20910 (301) 587-1788

National Braille Association 85 Godwin Avenue Midland Park, NJ 08432 (201) 447-1484

Recorded, large print and braille materials are available through this association.

National Easter Seal Society for Crippled Children and Adults 2023 W: Ogden Avenue Chicago, IL 60612 (312) 243-8400

National Federation of the Blind 1800 Johnson Street Baltimore, MD 21230 (301) 659-9314

National Labour Market Board Sundbybergsvagen 9 S-171 99 Solna Sweden

In connection with the International Year for Disabled Persons, the National Labour Market Board is planning to compile a catalog of solutions to various vocational problems. For further information write to the above address.

National Multiple Sclerosis Society 205 E. 42nd Street New York, NY 10017 (212) 986-3240

The National Rehabilitation Information Center (NARIC) 4407 Eighth Street, N.E.
The Catholic University of America Washington, D.C. 20017 main office (202) 635-5826 Information Specialist (202) 635-5822 TTY (202) 635-5884

NARIC is funded by Rehabilitation Services Administration (RSA) to improve information delivery to the rehabilitation community by: 1) supplying copies of research reports and audio-visual materials prepared with RSA funding, as well as journal articles, conference proceedings, and other types of publications; 2) preparing bibliographies tailored to specific requests; 3) helping you locate the answers to factual questions such as dates, places, names, addresses, or statistics. Pathfinder is published by NARIC six times a year, (see: Publications.)

National Society to Prevent Blindness 79 Madison Avenue New York, NY 10016 (212) 684-3505

National Spina Bifida Association of America 343 S. Dearborn Chicago, IL 60604 (312) 663-1562

National Spinal Cord Injury Foundation 369 Elliot Street Newton Upper Falls, MA 02164 (617) 964-0521

Office of Special Education and Rehabilitative Services Department of Education 400 Maryland Avenue, SW Washington, DC 20202 (202) 472-3740

The function of this office is to develop and implement educational policy to fulfill the mandates of Part B, Education of the Handicapped Act (P.L. 91-230) as amended by P.L. 43-380 and P.L. 94-142, Education of All Handicapped Children Act of 1975.

Office of Technology Transfer (OTT) Veterans Administration 252 Seventh Avenue New York, NY 10001 (212) 620-6659

OTT operates under the Rehabilitation Engineering Research and Development Service to transfer research results into clinical practice. This is accomplished by information dissemination on new devices and techniques developed in the rehabilitation engineering program through their publications. OTT maintains a reference collection on rehabilitative engineering available to anyone for use, but primarily helpful to those in medical, allied health and engineering fields. (Also see: Publications.)

REHABILITATION ENGINEERING CENTERS

These centers offer various forms of engineering services. (Alphabetized by State.)

Rancho Los Amigos Hospital 7601 East Imperial Highway Downey, CA 90242 (213) 922-7167

Rehabilitation Engineering Center Children's Hospital at Stanford 520 Willow Road Palo Alto, CA 94034 (415) 327-4800

Rehabilitation Engineering Center Smith-Kettlewell Institute of Visual Sciences 2232 Western Street San Francisco, CA 94115 (415) 563-2323

In addition to rehabilitation engineering research, the Center produces publications. (See: Publications.)

The George Washington University Medical Rehabilitation R & T Center 2300 Eye Street, NW Ross Hall, Room 714 Washington, DC 20037 (202) 676-3801

Rehabilitation Engineering Center Northwestern University 345 E. Superior Street Room 1441 Chicago, IL 60611 (312) 649-8649 Rehabilitation Engineering Center University of Iowa Orthopedics Department Dill Children's Hospital Iowa City, IA 52242 (319) 356-1616

Cerebral Palsy Research Foundation of Kansas, Inc. 4320 E. Kellog Street Wichita, KS 67218 (316) 683-5627

The Foundation produces a publication describing it's research, <u>Tech Briefs</u>. (See: Publications.)

Rehabilitation Engineering Center Children's Hospital Medical Center 300 Longwood Avenue Boston, MA 02115 (617) 734-6000

Tufts University
Medical Rehabilitation R & T Center
171 Harrison Avenue
Boston, MA 02111
(617) 956-5625

Rehabilitation Engineering Center University of Michigan 225 West Engineering Ann Arbor, MI 48109 (313) 764-1817

University of Minnesota Medical Rehabilitation R & T Center 860 Mayo Building Minneapolis, MN 55455 (612) 373-8990

National Institute for Rehabilitation Engineering 97 Decker Road Butler, NJ 07405 (201) 838-2500

New York University Medical Rehabilitation R & T Center 400 E. 34th Street New York, NY 10016 (212) 679-3200

In addition to rehabilitation research, the Center produces publications. (See: Publications.)

Rehabilitation Engineering Center Case Western Reserve University 2219 Adelbert Road Cleveland, OH 44106 (216) 368-2000

Rehabilitation Engineering Center Krusen Research Center Moss Rehabilitation Hospital 12th Street & Tabor Road Philadelphia, PA 19141 (215) 329-5715

The University of Tennessee Department of Orthopedic Surgery 1248 La Paloma Street Memphis, TN 38114 (901) 525-2531

Texas Institute for Rehabilitation and Research 1333 Mousund Avenue Houston, TX 77025 (713) 979-1440

Applied Rehabilitation Center Southwest Research Institute 2203 Babcock Road San Antonio, TX 78229 (512) 699-0386

Rehabilitation Engineering Center University of Virginia P.O. Box 3368 University Station Charlottesville, VA 22903 (804) 924-0311

University of Washington Medical Rehabilitation R & T Center cc 814 RJ 30 Seattle, WA 98195 (206) 543-3600

Rehabilitation Engineering Center Under Secretary of State for Rehabilitation Ministry of Social Affairs Mugamaa Building, Tahrir Square Cairo, Egypt

Rehabilitation Engineering Center Institute of Orthopedic Surgery and Rehabilitation Academy of Medicine Dzierzynskiego 135, 61 545 Poznan Poland Rehabilitation Engineer Center University of Ljubljana Department of Electrical Engineering 61001 Ljubljana, Trzaska 25 Yugoslavia

Rehabilitation Engineering Society of North America 1701 S. First Avenue Suite 504 Maywood, IL 60153

The Society is made up of consumers, therapists, counselors, manufacturers, providers and engineers who develop and provide technology to disabled people.

Rehabilitation International Information Service Stiftung Rehabilitation P.O. Box 101 409 D-6900 Heidelberg 1, Federal Republic of Germany

Stiftung Rehabilitation maintains a computerized system of available modified products.

San Francisco Lighthouse for the Blind 1155 Mission Street San Francisco, CA 94103 (415) 431-1481

Schwab Rehabilitation Hospital
Departments of Vocational Services and
Occupational Therapy
Technical Aids Evaluation, Training and
Demonstration Laboratory for the Physically
Disabled
1401 S. California Boulevard
Chicago, IL 60608
(312) 522-2010

The Technical Aids Laboratory is designed to give disabled individuals and social service specialists easy access to and information about technical aids for people who are handicapped. Evaluation of equipment and training in the use of aids are among the services offered.

Science for the Handicapped Association (SFHA) SSS 201 University of Wisconsin-Eau Claire Eau Claire, WI 54701 (715) 836-4164 Association members include science educators of students who are emotionally, mentally, physically or socially handicapped. The association was formed to promote science for all handicapped students in the schools. This is done through information dissemination at national conferences, publications and a bibliography on science for handicapped students. SFHA recently became an Associated Group of the National Science Teachers Association.

Swedish Engineering Employment Association Box 5510 S-114 85 Stockholm Sweden 468 631750 Telex 170 45

This association has formed a computer-based central information system called "Miljobanken" which contains solutions to various work environment problems. Members of the Swedish Engineering Employers' Association can join the "Miljobanken" system free of charge, nonmember firms and institutions can join for a fee.

Telephone Pioneers of America 30-C 1847 195 Broadway New York, NY 10017

The Telephone Pioneers of America is the world's largest voluntary association of industrial employees. It is composed of men and women in the United States and Canada who have served 18 or more years in the Bell System Companies, certain Canadian Telephone Industry Companies and Rochester Telephone Corporation. Working through 94 chapters in 48 states and Canada, Pioneers devote their free time to a wide range of community service activities. Pioneers' basements become workshops for the repair of recording machines for the blind and the manufacture and design of "talking toys" for autistic children. Special preschool programs have tested thousands of children for vision and hearing problems; older Americans have been screened for glaucoma and hypertension. To contact the Pioneer chapter in your area, consult the local city telephone directory.

TRACE Research and Development Center for the Severely Communicatively Handicapped 314 Waisman Center 1500 Highland Avenue Madison, WI 53706 (608) 262-6966 The TRACE Center works in cooperation with the Communication Aids and Systems Clinic of the University of Wisconsin-Madison, to study and develop techniques and aids which augment existing vocal skills of the clinic patient. Information on communication aids and techniques is collected, documented and disseminated by the Center through publications and a computer data base. (Also see: Publications.)

United Cerebral Palsy Assoc., Inc. 66 E. 34th Street New York, NY 10016 (212) 481-6300

People to People Committee for the Handicapped Directory of Organizations Interested in the Handicapped 1522 K Street, N.W. Room 1130 Washington, D.C. 20005 (202) 638-2487

This directory lists the names, addresses, phone numbers and officers of 118 organizations of or for handicapped persons. Each listing also describes the structure and purpose of the organization, its principal programs, major publications, newsletters and journals.

Appendix D Post Secondary Education

At universities, colleges and vocational schools across the United States, changes are being made to meet the needs of students who are handicapped. In this appendix the changes at some institutions are described. All institutions could not be included in the appendix. Information on a school's program may be listed under several titles. Often a good place to start is with the office of the Dean of Students.

The Hadley School for the Blind 700 Elm Street P.O. Box 299 Winnetka, IL 60093 (312) 446-8111

The Hadley School for the Blind, often called the "University of Courage," is the world's only correspondence school for blind students. Over 4500 students in every state in the U.S. and 55 foreign countries are currently enrolled, and over 125 brailled and or recorded correspondence courses are offered, tuition free. These college level courses are made available through cooperation with the Universities of Indiana, Wisconsin, California and Loyola. The Hadley School is supported entirely by gifts, grants and bequests from foundations, corporations, service groups and individuals.

HLMDC Audio-Visual Center Indiana University Bloomington, IN 47405 (812) 337-1511

The Handicapped Learner Materials Distribution Center (HLMDC) is a part of the Special Materials Project established by Indiana University. HLMDC loans free of charge, (except for return postage), selected media materials such as films, videotapes, kits, games and adaptive devices pertaining to the general special education population. Materials are divided into three collections represented by three separate catalogs: 1) teacher training materials in the area of special education and media production consisting mostly of 16 mm films; 2) handicapped learner collection consisting mostly of classroom curricular materials primarily for examination and evaluation; 3) videotapes that are duplicated into other formats at cost. These services are available to anyone in the U.S.A. involved with educating a handicapped learner.

Handicapped Student Services University of California, Riverside 11321 Library South Riverside, CA 92521 (714) 787-4538

The University of California, Riverside provides extensive services to students with disabilities. The relatively flat terrain makes on-campus travel easy for the mobility impaired student. A tactile map is also available to assist visually impaired students in learning the campus layout. UCR is 95% accessible and existing barriers are continually being identified and corrected. The Handicapped Student Services Office offers preadmission counseling to potential students with disabilities to help determine academic qualifications and to discuss financial, personal and mobility resources needed for independence.

Physically Limited Program De Anza College 21250 Stevens Creek Blvd. Cupertino, CA 95014 (408) 996-4753

The Physically Limited Program of De Anza College, begun in 1972, now operates year round and enrolled more than 500 students in the academic year 1978-79. It provides many of the support services that enable people to participate in the wide range of educational and self enrichment programs on campus. The level of involvement with the Physically Limited Program is dependent on the individual's need and desire.

Southern Illinois University Specialized Student Services Office Carbondale, IL 62901 (618) 453-5738

Southern Illinois University has tried to fully integrate disabled students into the University community by 1) removing physical barriers and 2) helping students adapt their abilities to the on-going University community. Students with varying disabling situations including those who are wheelchair-bound, semiambulatory, visually impaired, hearing impaired or learning disabled are enrolled at SIU. It is stressed that the handicapped student not be separated from the University as a whole.

Appendix E Publications

The following is a listing of periodicals and publications which may provide further information to the reader. For a listing of titles used in the catalog text see Bibliography.

PERIODICALS

Accent on Living. Bloomington, Illinois: Accent on Information, Inc.

This is a quarterly magazine of services and information on daily living and equipment for persons with disabilities. For further information, write: Accent, P.O. Box 700, Bloomington, IL 61701. (Also see: Organizations.)

American Rehabilitation. Washington, DC: Rehabilitation Services Administration.

This is the official bimonthly publication of the RSA. For further information, write: Superintendent of Documents, P.O. Box 1533, Washington, DC 20402.

Area Development Sites & Facility Planning. New York, New York: Halcyon Business Publications, Inc.

The January, 1978 edition of this magazine contains two feature articles concerning handicapped people. Terrance Moakley wrote the first article, entitled "It's Easy and Inexpensive to Install Facilities for the Handicapped." The second article, "What Companies Are Doing About Hiring Handicapped" was prepared by the magazine staff. For further information, write the above publisher at 432 Park Avenue South, New York, New York 10016.

<u>Bulletin of Prosthetics Research</u>. New York, New York: Veterans Administration.

This is a biannual report on research and development in rehabilitative engineering. For further information, write: Office of Technology Transfer, Veterans Administration, 252 Seventh Avenue, New York, NY 10001. (Also see: Organizations.)

Bulletins on Science and Technology for the Handicapped. Washington, DC:
American Association for the Advancement of Science.

This is a quarterly publication. For further information, write: Project on the Handicapped in Science, AAAS, 1776 Massachusetts Avenue, NW, Washington, DC 20036. (Also see: Classroom Materials; Organizations.)

Canadian Rehabilitation Council for the Disabled. <u>Let's get technical</u>.

Toronto, Ontario, Canada: Canadian Rehabilitation Council for the Disabled, 1-8, 1978.

This book is a compilation of <u>Let's Get Technical Bulletins</u> reprinted from <u>Rehabilitation Digest</u>, the journal of the Canadian Rehabilitation Council for the Disabled.

Capitol Publications, Inc., Suite G-12, 2430 Pennsylvania Avenue, NW, Washington, DC 20037.

An independent national news service which publishes fourteen different specialized newsletters for the education community. These publications provide current news regarding federal legislation, policies, trends, research, funding and practices concerning the education of handicapped students. Capitol Publications also offers workshops, seminars and books.

Cerebral Palsy Research Foundation. <u>Problem solving with rehabilitation engineering: Tech brief.</u> Wichita, Kansas: Cerebral Palsy Research Foundation of Kansas, Rehabilitation Engineering Center.

Published quarterly, <u>Tech Briefs</u> contain articles describing solutions to vocational problems found by the Rehabilitation Engineering Center. Potential products and concepts are discussed in the publications. Past issues have articles on a work station for a quadraplegic cerebral palsy typist; a reach instrument; a scanning calculator; a floor sweeping collector and a one-handed punch press. For further information, write: Cerebral Palsy Research Foundation of Kansas, Inc., 4320 E. Kellog Street, Wichita, KS 67218. (Also see: Organizations.)

Communication Outlook. East Lansing, Michigan: Michigan State University.

This is a quarterly newsletter on the application of technology to the needs of persons who experience communication handicaps due to neurological or neuromuscular conditions. For further information, write: Artificial Language Laboratory, Computer Science Department, Michigan State University, East Lansing, MI 48824.

Dialogue with the Blind. <u>Dialogue Magazine</u>. Berwyn, Illinois: <u>Dialogue</u>
Publications.

Published quarterly, this magazine is available in recorded, large print and braille editions. It is available from Dialogue with the Blind, regional libraries and the Library of Congress. For further information, write: Dialogue with the Blind, 3100 S. Oak Park Avenue, Berwyn, IL 60402. (Also see: Additional Available Resources.)

Helen Keller National Center for Deaf-Blind Youths and Adults. Nat-Cent News. Sands Point, New York.

This magazine, printed in large type for visually impaired readers, is published quarterly. It includes news and feature articles of interest to deaf and blind people. For further information, write: The Helen Keller National Center, 111 Middle Neck Road, Sands Point, New York 11050. (Also see: Organizations.)

<u>Informer.</u> Hot Springs, Arkansas: Arkansas Rehabilitation Research and Training Center.

This is a quarterly publication which disseminates and promotes the utilization of new research, training, knowledge and technology resulting from the Special Centers Program of the National Institute of Handicapped Research. For further information, write: Arkansas Rehabilitation Research and Training Center, P.O. Box 1358, Hot Springs, AR 71901.

International Commission on Technical Aids, Housing and Transportation.

ICTA multi-lingual manual on technical aids and index. Bromma,
Sweden: ICTA, 1964-1973.

Journal of Rehabilitation. Washington, DC: National Rehabilitation Association.

This is the quarterly publication of the NRA, a private nonprofit corporation dedicated to the rehabilitation and well being of handicapped persons. For further information, write: NRA, 1522 K Street, NW, Washington, DC 20005.

Library of Congress. <u>Reference circular</u>. Washington, DC: National Library Service for the Blind and Physically Handicapped, Reference Section.

Some of the circulars produced by the library are: Reading, Writing, and Other Communication Aids for Visually and Physically Handicapped Persons; Braille Instruction and Writing Equipment; National Organizations Concerned with Visually and Physically Handicapped Persons. These circulars are available free from the National Library Service for the Blind and Physically Handicapped, Library of Congress, Washington, DC: 20542. (Also see: Organizations.)

- National Association for Visually Handicapped. <u>In Focus</u> New York, New York: NAVH.
- Ibid. Seeing Clearly. New York, New York: NAVH.

These newsletters are printed in large type. <u>In Focus</u> is for children, <u>Seeing Clearly</u> for adults. NAVH prepares and distributes large print books. For other services they provide see Appendix C, Organizations. For further information on publications write: National Association for Visually Handicapped, 305 E. 24th Street, New York, NY 10010.

National Institute of Handicapped Research, <u>REHAB BRIEF</u>. Gainesville, Florida: University of Florida, Rehabilitation Research Institute.

REHAB BRIEF, (Bringing Research into Effective Focus), is prepared by the University of Florida for NIHR. Each issue is devoted to different vocationally related topics such as vocational evaluation or a particular disability. These publications are distributed by the University of Florida, Rehabilitation Research Institute, Gainesville, FL 32610. Braille and taped editions are available from regional service libraries.

NARIC. Pathfinder. Washington, DC: National Rehabilitation Information Center.

Published six times a year providing information on resources and technology in rehabilitation. It is available in both print and braille. For further information, write: NARIC, 4407 Eighth Street, Catholic University of America, Washington, DC 20017. (Also see: Organizations.)

<u>Paraplegia News</u>. Washington, DC: Paralyzed Veterans of America.

This is a monthly publication of news concerning civilians and veterans who are paraplegic and wheelchair bound. For further information, write: Paraplegia News, 5201 N. 19th Avenue, Suite 108, Phoenix, AZ 85015.

Rehabilitation Gazette. St. Louis, Missouri: Rehabilitation Gazette.

This is an annual international journal of independent living for the disabled. For further information, write: Rehabilitation Gazette, 4502 Maryland Avenue, St. Louis, MO 63108.

Rehabilitation Literature. Chicago, Illinois: National Easter Seal Society for Crippled Children and Adults.

This is the monthly interdisciplinary journal of the National Easter Seal Society. For further information, write: Rehabilitation Literature, 2023 W. Ogden Avenue, Chicago, IL 60612.

Rehabilitation World, The US Journal of International News and Information. New York, New York: Rehabilitation International U.S.A.

This is the quarterly publication of Rehabilitation International U.S.A. For further information, write: Rehabilitation World, 20 W. 40th Street, New York, NY 10018.

SAVI Update. Berkeley, CA: Science Activities for the Visually Impaired, University of California.

A newsletter on curriculum materials and education programs for the visually impaired student in science classes. Available from SAVI, Lawrence Hall of Science, University of California, Berkeley, CA 94720.

PUBLICATIONS

Accent on Living Buyer's Guide. Bloomington, Illinois: Cheever Publishing, Inc.

This is a list of devices and sources of special products and their manufacturers. For more information, write Accent, P.O. Box 700, Bloomington, IL 61701. (Also see: Organizations.)

American Association for the Advancement of Science. A research agenda on science and technology for the handicapped. Washington, DC: AAAS, 1979.

This is a report of a project which identified priority research needs in the area of science and technology for the disabled. For further information, write: Office of Opportunities in Science, AAAS, 1776 Massachusetts Avenue, NW, Washington, DC 20036. (Also see: Classroom Materials; Organizations.)

Anderson, E. Art for all the children: A creative sourcebook for the impaired child. Springfield, Illinois: Charles C. Thomas, 1978.

Adaptations for various art activities such as weaving and photography are presented with directions for making the adaptations. In the book are sections on art and learning disabilities, behavior disorders, hearing impairments, visual impairments, mental retardation and physical disabilities.

Antenucci, B. & Corthell, D. <u>Rehabilitation engineering: A counselor's guide</u>. Menomonie, Wisconsin: Research and Training Center, Stout Vocational Rehabilitation Institute, University of Wisconsin-Stout.

This document is a report from a study group of the Sixth Institute on Rehabilitation Issues, June 5th to 8th, 1979. The group was to develop resource material on engineering as it relates to the rehabilitation process and the vocational options of handicapped people. Applications of engineering technology, legal issues and assessing a person's needs are some of the topics the publication addresses.

Athelstan, G., Bower, A. & Crewe, N. <u>Employment after spinal cord injury</u>. Minneapolis, Minnesota: University of Minnesota, 1978.

This book offers many new ideas about the employment options available to quadriplegics and paraplegics. Personal experiences were collected from more than 100 spinal cord injured men and women. They describe how they found their jobs, the kinds of problems they faced, and the solutions they found. They discuss their duties and the satisfactions and frustrations of working.

Bell, T.E. <u>Technologies for the handicapped and the aged</u>. Washington, DC: National Aeronautics and Space Administration, Technology Transfer Division, July, 1979.

This booklet contains brief descriptions of NASA technology which has been incorporated into projects for people who are handicapped or elderly. It is written in nontechnical language.

Botterbusch, K.F. <u>A guide to job site evaluation</u>. Menomonie, Wisconsin: Materials Development Center, Stout Vocational Rehabilitation Institute, University of Wisconsin-Stout.

This book explains how to use different types of job site evaluations, how to set up a job site and evaluate the client. Included are sample evaluation forms.

Bruwelheide, K.L. Assisting the physically handicapped: An identification and development of apparatus for laboratory shop phase I. Bozeman, Montana: Montana State University, Department of Agricultural and Industrial Education, 1979. Through the Montana Office of Public Instruction.

This is a report of a research project which was conducted to design, develop and test apparatus that will permit physically handicapped individuals to properly, safely and independently use shop tools and equipment commonly identified in industrial arts and vocational agriculture curriculum guides. A set of working drawings of the apparatus is included. This publication also contains a model for teacher

assessment of physically handicapped students to determine their capabilities and limitations.

Carner, M.N., Otten, P., & Reich, N. Clothing for handicapped people, an annotated bibliography and resource list. Tucson, Arizona: University of Arizona, 1979.

This bibliography provides information related to clothing for handicapped people. In addition, it identifies product sources. The bibliography has been compiled for handicapped people, organizations that assist them, professionals, paraprofessionals and students interested in this topic. It is the authors' intention to review and update the publication every three years to permit additions and deletions when necessary.

Coons, M. & Milner, M. (Eds.). <u>Creating an accessible campus</u>. Washington, DC: Association of Physical Plant Administrators of Universities and Colleges, 1978.

Of particular interest to readers are the chapters discussing developing an accessible science laboratory, descriptions of instructional aids and funding sources.

- Copeland, K. (Ed.). Aids for the severely handicapped. Richmond, England: Sector Publishing Ltd., 1974.
- Do it yourself again. New York: American Heart Association, 1969.

This booklet describes self-help devices for people recovering from a stroke. A wide variety of aids are pictured and described. These aids are designed to help stroke patients achieve self care skills and independence. Available through your local heart association.

- Gault, et. al. Manual of methods for construction of inexpensive rehabilitation equipment for use in "Activities of Daily Living" in hospitals and homes. Ryukyu, Hawaii: University of Hawaii Postgraduate Medical Education Program, 1971.
- Geist, C.S. & McMahon, B.T. Region V short term training conference on job modification, job restructuring and job engineering for severely disabled persons. Chicago, Illinois: Illinois Institute of Technology Proceedings, April 16-17, 1979.

This manual fully describes the conference on job modification, job restructuring and job engineering for severely disabled persons. The publication includes the workshop agenda, an annotated list of the films shown at the conference and copies of the speeches delivered

at the conference. The manual also contains conference evaluations and resource materials.

Green Pages Rehab SourceBook Winter Park, Florida: SourceBook Publications, Inc., 1979.

A directory of products and services for the disabled grouped by service categories and states.

Haggerty, J. Spinoff 1979. Washington, D.C.: National Aeronautics and Space Administration, Technology Transfer Division, February, 1979.

In this publication, written for the general public, are descriptions of products used in everyday life which are derived from NASA technology; there is a list of NASA Field Centers, Applications Centers and Application Teams.

High, E.C. A resource guide to habilitative techniques and aids for cerebral palsied persons of all ages. Washington, DC: The George Washington University, Job Development Laboratory, 1979.

This book describes numerous aids, equipment, treatment programs and treatment techniques. In addition, each section of the book provides a preliminary text and an extensive reference list to help the reader select appropriate resources. Subject areas include treatment techniques, and advice to parents in positioning and seating, feeding, dressing, hygiene and household and community involvement.

Hohenshil, T.H. & Maddy-Bernstein, C. Resource guide: Vocational counseling for the handicapped. Blacksburg, Virginia: Virginia Tech University, College of Education, 1980.

This guide is designed to assist educational personnel to expand and increase the effectiveness of their vocational guidance and counseling programs for the handicapped. The guide includes information about books, articles, research reports, A-V materials, staff training materials, organizations and directory lists. Topics include counseling, education, job placement, career education, legislation, counseling families of the handicapped, organizations, and multi-media materials.

Information Exchange Program. <u>Publications and audiovisual aids directory of the rehabilitation research and training centers</u>. Hot Springs, Arkansas: Arkansas Rehabilitation Research and Training Center, 1978.

This directory combines two documents that have previously been published separately. Part I contains a bibliography of 2,054 publications resulting from research supported by the Rehabilitation Research & Training Centers. Part II is devoted to a current listing of audio-visuals developed or used by R&T Centers in their training programs.

Institute for Information Studies. Rehabilitation engineering source books. Falls Church, Virginia: Institution for Information Studies, 1979.

This document is designed to serve as a source book, or reference work, for day-to-day use by rehabilitation practitioners whose clients find themselves barred from certain activities by functional limitations resulting from a disability. Here, the user may learn whether a similar problem has elsewhere been found to have a technological solution. It is a practical aid which chronicles actual rehabilitation problems which have been successfully resolved through the use of technology, especially applications from the field of rehabilitation engineering.

International Labour Office. <u>Documentation vocational rehabilitation</u>. Geneva, Switzerland: International Labour Office, 1975.

This publication, written in English, French and Spanish presents a list of I.L.O. (International Labour Office) documents. The list includes documentation of technical experience, legislation and research in the field of social integration and vocational rehabilitation of the handicapped. This list can be a useful aid for increasing the effectiveness of services to handicapped persons.

International Nickel Company. <u>Design for the disabled</u>. New York, New York: International Nickel Company, 1979.

This booklet presents colored photographs and descriptions of furniture, plumbingware (faucets) and hardware products that have been designed for the disabled. The basic physical actions of reach, grasp, force and movement are associated with the products for visual appeal and durability.

Jamison, S.L. (Ed.). Computing careers for deaf people. New York, New York: Association for Computing Machinery, Inc., 1976.

This manual contains the verbatim proceedings of the <u>National</u> <u>Conference on Computing Careers for Deaf People</u>. Topics addressed at the conference included: perspective on deaf people, perspective on computing careers, educational opportunities in computing special programs, placement problems and solutions, on the job problems and solutions and success factors in employment.

Johnson, M.D., Quarve, J., & Stanton, J. <u>Product inventory of hardware</u>, equipment and appliances. Minneapolis, Minnesota: National Handicapped Housing Institute, 1978.

Products used in the home are evaluated for their potential ease of operation by people with all types of handicaps. In the catalog a list of appropriate considerations exists for each type of product. Different manufacturer's products were then evaluated (yes, no) using the list of considerations, (e.g. is there large easy to read signage on a kitchen range). Each evaluation page has on it manufacturer's address, and phone number, price, model number, photo and comments. Available from National Handicapped Housing Institute, Minneapolis, Minnesota.

Kernaleguen, A. <u>Clothing designs for the handicapped</u>. Canada: University of Alberta Press, 1978.

Brief instructions for adapting various pieces of clothing are given in this book.

King, M.F. <u>Barrier free design equipment and aids catalogue</u>. West Bloomfield, Michigan: Michigan Center for a Barrier Free Environment, 1979.

This publication describes over 100 products to aid handicapped people. The descriptions include pictures and product source information. In addition, this manual contains a list of manufacturers and suppliers and a list of other sources.

Klinger, J.L. <u>Mealtime manual for people with disabilities and the aging.</u> Camden, New Jersey: Campbell Soup Company, 1978.

This book describes numerous shortcut techniques and suggestions for performing basic kitchen tasks. All are kitchen tested and adapted for disabled and elderly cooks. In addition, the book contains recipes, menus and information about good nutrition. A list of helpful references, agencies and product sources is included at the end of the book.

LaRocca, J. & Turen, J.S. <u>The application of technological developments</u> to physically disabled people. Washington, D.C.: The Urban Institute, 1978.

This paper attempts to assess the impact of technological advances and rehabilitation technologies on disabled people. The degree to which these technologies have helped disabled people overcome the effects of their disabilities is also assessed. The focus of this paper is on blind, deaf and wheelchair bound individuals. Included in this paper is a discussion of the effect of public

policy, and the research, manufacturing, marketing, training and funding problems associated with the development and application of advanced technology. Future potential as well as the current limitations of employment, housing and transportation are considered.

Lowman, E. & Klinger, J.L. <u>Aids to independent living: Self-help for</u> the handicapped. New York: McGraw-Hill Book Company.

This book contains a comprehensive compilation of devices in the categories of tasks of daily living, ambulation, housing, furniture, homemaking, communications, vocations, recreation, transportation and travel, education, and speech. Each chapter has a bibliography pertaining to that activity category. At the end of the book is a listing of equipment sources.

Mallik, K. & Yuspeh, S. <u>Job development and enhanced productivity</u> for severely disabled persons. Final Report R.S.A. Grant No. 16-P-56803/3. July 1979. Washington, DC: Job Development Laboratory, 1979.

The purpose of this project was to develop a model for placing severely disabled persons in competitive employment. The goal was to increase employment and placement of severely disabled persons by increasing their capacity to perform a wider range of the physical tasks ordinarily associated with information handling jobs.

McCullough, H.E. & Farnham, M.B. <u>Kitchens for women in wheelchairs</u>. Urbana, Illinois: University of Illinois, 1961.

This publication contains pictures, descriptions and blueprint drawings of kitchen arrangements adapted for persons in wheel-chairs. Included are specially designed work and storage units and suitable commercial appliances. This manual can be obtained from Small Homes Council-Building Research Council, One East Saint Mary's Road, Champaign, Illinois 61820.

Meers, G.D. (Ed.) Handbook of special vocational needs education.
Gaithersburg, Maryland: Aspen Systems Corp., 1980.

This is a book of readings about special vocational needs education. Topics covered include the identification and characteristics of disadvantaged students, identification and characteristics of handicapped students, curriculum modification and instructional practices, work experience and cooperative placement programs, teacher strategies for counseling special needs students, parents' roles, administrative and supervisory functions, and program evaluation.

Mueller, J. <u>Designing for functional limitations</u>. Washington, DC: The George Washington University Rehabilitation Research and Training Center, Job Development Laboratory, 1979.

Mueller has designed office and industrial worksites that provide functional environments for the handicapped worker. This manual presents illustrations of the worksites, along with suggested modifications to make the worksite usable. This resource does not deal with architectural accessibility per se. The focus is usability, to enable the disabled worker to function independently. (Also see: Modifications to the Work Environment.)

Office for Handicapped Individuals. Resource guide: Rehabilitation engineering and product information. Washington, D.C.: Author, 1980.

Resources included in the guide provide information on sensory, mobility, and communication technology which assist handicapped individuals in daily living, educational, recreational, vocational, and transportation activities. Contents include:

1) federal and private sources of information; 2) general information sources; 3) financial assistance and loans for aids and equipment; 4) funding guide; 5) publications; 6) future information sources on engineering products.

Phelps, L.A. & Batchelor, L.T. <u>Individualized education programs (IEPs):</u>

<u>A handbook for vocational education.</u> Columbus, Ohio: National
Center for Research in Vocational Education, 1979.

This 38 page monograph (Information Series No. 188) describes the following aspects of IEP development and implementation: description of the IEP, cooperative planning, levels of IEP development, and an IEP process model. The model covers referral of students, informal data collection, sharing of assessment information, making placement decisions, developing and writing the IEP, implementing and monitoring the IEP, and evaluating the IEP. A sample IEP is also included.

- Rehabilitation Engineering Center. <u>Controls: Reference catalog to aid physically limited people in the operation of assistive devices.</u>
 Palo Alto, California: Children's Hospital at Stanford, Rehabilitation Engineering Center, 1980.
- Robinault, I.P. (Ed.). <u>Functional aids for the multiply handicapped</u>. New York: Harper and Row, 1973.

Information in this resource manual will aid people with multiple disabilities to function more independently. The book answers questions of what to use, where to buy it, or how to construct it.

The content is grouped into four parts: transfer, travel, and mobility; personal care; communications and learning; and recreation.

Saunders, F.A. Rehabilitation engineering aids and devices for persons with impaired hearing. San Francisco, California: Smith-Kettlewell Institute.

This catalog lists devices for the hearing impaired along with descriptions and addresses for further information. This publication contains both currently available devices and those under development. Readers can join the mailing list and receive current updates of the catalog. (Also see: Organizations.)

Shaw, A.M. & Stevens, C (Eds.). <u>Drama, theatre, and the handicapped.</u>
Washington, DC: American Theatre Association, 1979.

A collection of essays intended to reinforce awareness and increase knowledge of issues, needs and problems related to fostering the full participation of individuals who are handicapped into drama and theatre activities. The first section looks at ways drama and theatre relate to handicapped individuals as an art form, an educational process, a therapy, a career. In the second section ways of eliminating barriers to full involvement are presented, including suggestions for on stage, behind the stage and in front of the stage accessibility. Drama programs by, for and with handicapped people are described in section three. An annotated bibliography is found in section four.

Skurnick, L.S. & Seigel, D.H. A partially annotated bibliography of job related physical capacities. Miami, Florida: Center for Labor Research and Studies, 1979.

This bibliography includes materials related to the following topics: job analysis, tests and testing, matching job demands and physical abilities, work evaluation and guidance, and bibliographies and legal references. (Also see: Organizations.)

Special education materials made available through the BEH marketing program. Westerville, OH: LINC, 1980.

An annotated collection of products, distributors and publications compiled by LINC Services, Inc. LINC is a corporation organized to link new resources produced through research and development with dissemination resources.

Steps Toward Campus Accessibility. Washington, DC: Association of Physical Plant Administrators of Universities and Colleges, March, 1979.

Programs which have been successful im making various college campuses accessible to students who are handicapped are described in this publication.

Strebel, M. Adaptations and techniques for the disabled homemaker (fifth edition). Minneapolis, Minnesota: Sister Kenny Institute, 1978.

Many suggestions for modifications of the work space are given as well as descriptions of available products useful to a person who is disabled. Some of the homemaking areas covered are storage space, selecting appliances, food preparation and sewing. There is also a list of additional reading.

Vanderheiden, G. & Grilley, K. <u>Non-vocal communication techniques and aids for the severely physically handicapped</u>. <u>Madison, Wisconsin:</u>
Trace Research and Development Center, 1975.

This publication is based upon transcriptions from the 1975 Trace Center National Workshop series. Development of communication in the non-vocal physically handicapped child (or adult) was the topic presented at the workshop. The subject matter includes definitions of the problem and descriptions of the tools that can be employed to develop an effective supplementary channel of communication for a non-verbal physically handicapped child. Programs demonstrating the application of some of the tools are also described. (Also see: Organizations.)

Vanderheiden, G.D. <u>Non-vocal communication resource book.</u> Madison, Wisconsin: Trace Research and Development Center.

Illustrations and descriptions of communication aids for non-vocal individuals are presented in this book. Included in this publication are descriptions of custom communication boards, charts and lap trays. (Also see: Organizations.)

Vieceli, L. (Ed.). <u>Guidelines for the selection, training, and placement of blind persons in information service expediting</u>. <u>Carbondale, Illinois</u>: Southern Illinois University, 1975.

Information Service Expediting (I.S.E.) is an occupational area which provides an ever-increasing number of job openings for blind persons. Jobs in this field utilize the telephone and other telecommunications equipment to provide agencies and businesses with explanations and information referrals. This manual presents guidelines for the selection, training, placement, and job restructuring for blind persons in I.S.E.

Appendix F Classroom Material

The reader will find in this appendix some materials which may be helpful in teaching students who have special needs. This appendix contains a sampling of available material, not an exhaustive listing.

Adams, Gary H. (compiled by). Science for the physically handicapped in higher education: A guide to sources of information. Washington, DC: National Oceanic and Atmospheric Administration, Environmental Data and Information Service.

This guide provides brief descriptions of organizations who can provide information, assistance, and modifications in the science fields for students who are physically handicapped.

American Association for the Advancement of Science Office of Opportunities in Science 1776 Massachusetts Avenue, N.W. Washington, DC 20036 (202) 467-4400

Redden, M.R., Davis, C.A., & Brown, J.W. <u>Science for handicapped</u>
students in higher education: Barriers, solutions and recommendations. Washington, DC: American Association for the Advancement of Science, 1979.

Handicapped persons who wish to enter careers in science encounter numerous barriers. The authors of this report gathered data from several sources in order to identify barriers to post-secondary science education and to look at methods for overcoming them. (Also see: Organizations, Publications.)

Resource directory of handicapped scientists. Washington, DC:
American Association for the Advancement of Science.

This directory contains a listing of scientists who are handicapped and are willing to consult on a variety of science related subjects. Information on each individual listed includes their names, scientific discipline, most recent position, nature of handicap, and expertise and consulting interests. (Also see: Organizations; Publications.)

American Foundation for the Blind 15 W. 16th Street New York, NY 10011 (212) 620-2000

Materials can be borrowed at no cost from the N.C. Migel Memorial Library. It contains a collection of literature, films and educational programs. (Also see: Additional Available Resources; Organizations.)

Argus Kommunikation Verlag fuer Lehr-und Lernmittel GmbH Postfach 1948 Ortenberger Str. 7 D-7600 Offenburg West Germany

In the 1980 catalog, the careers section has various materials useful for career awareness and vocational information at different grade levels.

Calhoun, M.L., and Hawisher, M.F. <u>Teaching and learning strategies</u>
for physically handicapped students. Baltimore, Maryland:
University Park Press, 1979.

This book is for teachers of students with physical disabilities. The text is designed to help school personnel develop thoughtful, well researched guidelines for establishing new programs and improving existing ones. In the book, the practical issues of setting up a classroom program, finding appropriate assessment techniques, developing teaching materials, and working with other professionals are discussed within the framework of the current research on the educational needs of the physically handicapped population.

Capital Area Career Center. <u>Adapting vocational education for handicappers</u>. Mason, Michigan: Author, 1980.

This is a series of 37 manuals which identify the physical skills and working conditions required in each of 34 occupations. The manuals also provide a method for comparing a student's physical abilities to the physical requirements of occupations, so he or she can choose a vocational program. In addition, they provide guidelines for making adaptations in the vocational classroom to help the student function in the program he or she chooses.

Chabot College 25555 Hesperian Boulevard Hayward, CA 94545 (415) 786-6700

Brown, R.N. Development of curriculum for a non-traditional machine tool technology program accessible to the physically handicapped. Hayward, California: Chabot College, South County Community College District, 1979.

This manual describes the program and curriculum for Computerized Numerical Control in the Machine Tool Technology area. This program evolved from two forces. The first force was the increase of computer run machines in industry. The second was legislation mandating that college level programs be accessible to the physically handicapped.

Developmental Learning Materials 7440 Natchez Avenue Niles, IL 60648 (800) 621-5809

Distributors outside U.S.A.:

PMB Industries, Ltd. 1220 Eleesmere Road Units 15-17 Scarborough, Ontario Canada M1P 2X5

DLM Japan, Ltd. 7th Floor Shibyua Building 1 Naito-cho, Shinjuku-ku Tokyo, Japan

Juan Suarez, Inc. 1762 Ponce de Leon Avenue Santurce, Puerto Rico 00909

Argus Communications Plumpton House Plumpton Road Hoddesdon, Herts EN11 OLB England

Driver Training Program Rehabilitation Institute 261 Mack Boulevard Detroit, MI 48201 (313) 494-9813 Persons who are handicapped are evaluated and trained as drivers and assisted in selecting adaptive devices to help them as motorists. Driving instruction, (which is individually programmed), is provided by a driver trainer who is also an occupational therapist. Any physically handicapped person is eligible for an evaluation of his or her driving potential through this program.

experience education

Project Discovery Catalog
Southwest Towa Learning Resources Center
401 Reed Street
Red Oak, IA 51566
(712) 623-4913

Project Discovery is a hands-on career exploration package. The catalog lists the jobs for which packages are available. Each package consists of a vocabulary book, ("First Look Book"), student instructions and the equipment needed for the exploration activities.

Hadary, D.E. & Cohen, S.H. <u>Laboratory **sci**ence</u> and art for blind, <u>deaf</u>, and <u>emotionally disturbed children</u>: A mainstreaming <u>approach</u>. Baltimore, MD: University Park Press, 1978.

A series of lessons used in mainstreamed classes.

Heller, J. How to master touch typing step-by-step (with one hand).
Wantagh, New York: Special Education Step-by-Step, 1966.

Jack Heller has developed a program to teach handicapped persons to type as effectively as nonhandicapped persons. Individuals who have missing fingers learn to type by using a mouthstick, head pointer, elbow pointer, toe, one hand or even a few fingers on one or both hands. The materials developed by the author include a teacher's guide, keyboard charts and books of typing drills and exercises. The charts which illustrate finger positions on the keyboard can be reproduced without prior written permission. The author has also developed typing programs for legally blind, learning disabled and bilingual students.

Hubbard
Special Education Materials
P.O. Box 104
Northbrook, IL 60062

Media materials are available on several topics including training regular classroom teachers to work with students who are mainstreamed, the law and education, behavior problems and planning Individualized Educational Programs.

Human Resources Center Albertson, Long Island, NY 11507 (516) 747-5400

Yuker, H.E., Feldman, M.A., Fracchia, J.F. and Younng, J.H. <u>The</u>
modification of educational equipment and curriculum for
maximum utilization by physically disabled persons: Educational and school equipment for physically disabled students.
Albertson, New York: Human Resources Center, 1967.

This publication provides information pertinent to the education of severely physically disabled children. The monograph discusses school equipment that is nonlimiting in the sense that it presents no barriers and or removes any barriers which might be encountered by a student with a physical disability. In addition, it offers a guide to modifying and selecting equipment for maximum utilization by disabled students.

Ken Cook Educational Systems 12855 W. Silver Spring Drive P.O. Box 207 Butler, WI 53007 (414) 466-6060

Ken Cook has available audio-visual learning packages for individual work stations. Some of the subjects are: Small Engine Technician, Diesel Generator Technical Course, Marine Engine Technician, Careers in Welding and Communicating for Careers.

Maryland Vocational Curriculum Production Project Western Maryland Vocational Resource Center P.O. Box 5448, McMullen Highway Cresaptown, MD 21502 (301) 777-5886 Mangano, R.M., Foster, P.R., Hafen, S., DeGrey, G., Buxton, R.

Vocational curriculum resources for handicapped students: A
guide to print and nonprint instructional materials. College
Park: University of Maryland, Maryland Vocational Curriculum
Research and Development Center, 1979.

This guide consists of an instructional checklist for each resource. The checklist indicates evaluative comments on usability and suitability, information on readability, format, (instructional, non-print, etc.) and intended use. Topics covered include agriculture, auto body repair, auto mechanics, basic math skills, basic reading skills, business education, career education, carpentry, cosmetology, custodial and maintenance, data processing, electricity, electronics, food industries, graphics, health occupations, home economics, needle trades, life skills and consumer education, safety, welding and professional resources.

National Association of the Deaf 814 Thayer Avenue Silver Spring, MD 20910 (301) 587-1788

Edwards, G.A. (Ed.). <u>Teacher/counselor guide to:</u> <u>Is science a possible career for you?</u> Philadelphia, PA: Research for Better Schools, 1978.

Lesson plans for a science career development program designed for students who are deaf. It addresses the questions "Why consider a science career"?, "What do people in science do"? and "How do you find out if science is a career for you"? A filmstrip is also included in the program materials.

National Science Foundation-H Project
"Adaptation of Science Learning Experiences
for Visually Impaired Students"
St. Mary's Junior College
2500 S. 6th Street
Minneapolis, MN 55454
(612) 332-5521

At St. Mary's, a Project Coordinator works with teachers and students to adapt science classes. An information sheet has been written explaining the process used to adapt general science classes, suggestions for adapting the science laboratory and examples of adaptations for the biology laboratory. Suggestions include techniques in labeling, measuring, diagramming and carrying out an enzyme experiment.

New Jersey Institute of Technology 323 High Street Newark, NJ 07102 (201) 645-5369 or 645-5371

Cochin, I. & Herman, H. The macrolab: A center for the handicapped at New Jersey Institute of Technology. Final Project Report.

Newark, NJ: New Jersey Institute of Technology, 1979.

The goal of this program is to aid handicapped individuals to achieve their career and educational objectives. The report describes the process used to help handicapped participants develop skills, methods and devices to enable them to overcome barriers arising from their handicaps. The report includes descriptions of devices developed. Among these are a spectrometer, electronic breadboard, meter reader, pan balance, and vibration demonstration device for participants with visual, hearing, or physical disability.

New York University Medical Rehabilitation R&T Center 400 E. 34th Street New York, NY 10016 (212) 679-3200

Hunt, G., Judson, J., Kristeller, E., Rush, H., and Zimmerman, M.

A manual for training the disabled homemaker. Rehabilitation monograph VIII. New York, New York: New York University Medical Center, 1970.

The information contained in this manual will aid instructors and those who set up disabled homemaker training programs. The topics presented in the manual include simplifying work, conserving energy, and performing certain necessary skills. In addition, the manual provides descriptions of disabling conditions. (Also see: Organizations.)

P.R.I.D.E. Foundation 1159 Poquonnock Road Groton, CT 06340 (800) 962-0707 (203) 447-7433

Kennedy, E.S. A curriculum for advanced level of in-service training for the homemaker home health aid for the State of Connecticut.

Groton, Connecticut: P.R.I.D.E.

This guide consists of a variety of one hour lesson plans for 18 different modules including communication, home management and practical nursing. (Also see: Additional Available Resources.)

Recording for the Blind, Inc. 215 East 58th Street New York, NY 10022 (212) 751-0860

Taped educational books are lent at no cost to visually and physically handicapped students.

Ridley, A.F. Space and equipment for teaching independent living skills to the handicapped. Tallahassee, Florida: Florida Department of Education, 1975.

This manual provides information about teaching independent living skills to the handicapped in both the public secondary schools and special facilities. Included in the manual are numerous photographs and descriptions which show various uses of space and equipment. The publication can be useful in planning new facilities, renovating or remodeling present facilities and in adding small and large equipment.

Sped Publications 2010 Eagle View Drive Colorado Springs, CO 80907

Taylor, B. <u>Basic introduction to typing</u>. Colorado Springs, Colorado: Sped Publications.

A basic typing course consisting of 12 cassette tapes, (24 lessons), a Teacher's Manual and a head set for the tape recorder. The course covers the complete keyboard, numbers, symbols, centering, simple manuscript typing, letter formats and envelope addressing. This course, compiled for students with a visual impairment, can also be used by students who are slow learners, emotionally disturbed, mentally retarded or have low reading skills. The course is designed for students to progress at their own rate.

Studley, V. <u>Left-handed calligraphy</u>. New York, New York: Van Nostrand Reinhold Company, 1979.

Some of the problems the author's students encountered in calligraphy were solved by forming the letters in the reverse direction of the usual way of forming them.

Tombaugh, D. <u>Biology for the blind</u>. Euclid, Ohio, Euclid Public Schools, 1973.

This manual presents extensive information on how to teach biology to the blind student. The first three chapters discuss class orientation, laboratory assistants and class-room procedures such as tests, homework and laboratory reports. Chapter four contains information about the texts and equipment that are available. Chapter five describes techniques which enable the blind student to participate in class activities.

University of Iowa Office of Services for Handicapped Iowa City, IA 52240 (319) 353-6967

Office of Services for Handicapped. <u>Serving handicapped students:</u>
<u>A faculty/staff handbook</u>. Iowa <u>City: University of Iowa.</u>

This 20 page booklet contains information designed to help university faculty instruct disabled students more appropriately. Topics covered include attitudinal considerations and techniques to help students with various disabilities; hearing impairments, visual impairments, speech impairments, motor impairments, epilepsy, diabetes mellitus, learning disabilities, and emotional disorders.

University of Wisconsin-Stout Menomonie, WI 54751

Draemer, D.G. <u>Driver education for the handicapped manual</u>. Menomonie, Wisconsin: <u>University of Wisconsin-Stout</u>, 1976.

This manual was prepared as a curriculum and aid for driver educators and handicapped students at the University of Wisconsin-Stout. Fifteen lessons for teaching basic behind-the-wheel driving skills are included. In addition, the manual offers useful suggestions and information relevant to driver education for the handicapped.

Wisconsin Vocational Studies Center 1263 Educational Sciences Building 1025 W. Johnson Madison, WI 53706 (608) 263-4151 Tindall, L.W., Gugerty, J.J., Crowley, C.B., Getzel, E.E., Salin, J., & Fessenden, P.K. <u>Puzzled about educating special needs students?</u>:

A handbook on modifying vocational curricula for handicapped students. Madison, Wisconsin: Wisconsin Vocational Studies Center, 1980.

This handbook contains practical suggestions and strategies for the vocational training of handicapped students. Chapters cover the following topics: working with other professionals, emotional impairments of learning, learning disabilities, mental retardation, visual impairments, hearing impairments, physical impairments, vocational assessment -- both formal and informal -- and models of service delivery.

Ibid. Puzzled about educating special needs students?: Annotated bibliography. Madison, Wisconsin: Wisconsin Vocational Studies Center. 1980.

This annotated bibliography contains descriptions of 496 items. These items have been arranged into several categories. An individual citation was listed in two or more categories if appropriate. The categories include: comprehensive programming, administration, curriculum modifications, career education and employment, counseling and supportive services, individualized education programs, inservice and preservice training, legislation and litigation, mainstreaming, resources and bibliographies, specific disability areas, and assessment issues.

Ibid. Puzzled about educating special needs students?: User's guide for the handbook on modifying vocational curricula for handicapped students. Madison, Wisconsin: Wisconsin Vocational Studies Center, 1980.

The user's guide describes ways to organize and conduct inservice training in the major topics covered in each chapter of the handbook described above. In addition, the user's guide contains a chapter on the mechanics of organizing and conducting inservice meetings.

Appendix G Distributor Outlets

Some of the products appearing in the catalog are available for sale at several locations. When a developer provided a listing of these locations, the For Sale section refers the reader to this appendix.

Bernina Sewing Machine (pg. 610) Contact importer for nearest dealer

Swiss Bernina Inc. 534 W. Chestnut Hinsdale, IL 60521

Larson Bernina Corporation 2017 E. 38th Street Minneapolis, MN 55402

Bernina Sewing Machines Co., Inc. 70 Orchard Drive North Salt Lake, UT 84054

Touch Fone Adapter (pg. 204) Distributors

Buckeye Telephone & Supply 1250 Kinnear Road Columbus, OH 43221 (614) 488-0655

GTE Automatic Electric 400 N. Wolf Road Northlake, IL 60164 (312) 562-7100

Midwest Telephone Supply P.O. Box 1319 Appleton, WI 54911 (414) 734-5632

North Supply Company 10951 Lakeview Avenue Lenexa, KS 66215 (913) 888-9800

Sterling Products Co. 1575 Wyoming Forty-Fort, PA 18704 (717) 288-7471

Mowat Sensor (pg. 494)

Australia

Wormald International Sensory Aids Ltd. P.O. Box 2231 North Parramatta NSW 2151 Australia

Europe

Wormald Interantional Sensory Aids 7 Musters Road West Bridgford Nottingham NG 2 7 PP England

Sonicquide (pg. 496)

Australia

Wormald International Sensory Aids Ltd. P.O. Box 2231 North Parramatta NSW 2151 Australia

Europe

Wormald International Sensory Aids 7 Musters Road West Bridgford Nottingham NG 2 7 PP England

All other countries

Wormald International Sensory Aids P.O. Box 10014 Christchurch, New Zealand

Canon Electronic Calculator with Printout, Display and Voice (pg. 462)

U.S.A.

Canon U.S.A., Inc. 10 Nevada Drive Lake Success Long Island, NY 11042

Canon U.S.A., Inc. 140 Industrial Drive Elmhurst, IL 60126

Canon U.S.A., Inc. 123 Paularino Avenue East Costa Mesa, CA 92626

Canon U.S.A., Inc. 6380 Peachtree Industrial Boulevard Norcross, GA 30071

Australia

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